

DOCUMENT RESUME

ED 409 435

CE 074 355

TITLE Public Service Education. Vocational Education Program Courses Standards.

INSTITUTION Florida State Dept. of Education, Tallahassee. Div. of Applied Tech., Adult, and Community Education.

PUB DATE Jul 97

NOTE 317p.; Supersedes ED 374 258.

AVAILABLE FROM Florida Department of Education, Product Distribution, Tallahassee, FL 32399 (order no. PS 483 BK 97).

PUB TYPE Guides - Classroom - Teacher (052)

EDRS PRICE EDRS Price MF01 Plus Postage. PC Not Available from EDRS.

DESCRIPTORS Behavioral Objectives; Career Exploration; Civil Engineering; *Competency Based Education; Cooperative Education; Criminology; Deaf Interpreting; Employment Qualifications; Entry Workers; Environmental Technicians; Fire Fighters; Fire Protection; Government Employees; Job Skills; Job Training; Law Enforcement; Legal Assistants; Postsecondary Education; Probation Officers; Public Administration; *Public Service Occupations; Recreation; Secondary Education; Security Personnel; Sign Language; Social Services; State Curriculum Guides; *State Standards; *Statewide Planning; Student Evaluation; Teacher Aides; Teaching Guides; *Technology Education; Trainers; Urban Planning; *Vocational Education; Waste Disposal; Waste Water; Water Treatment

IDENTIFIERS *Florida

ABSTRACT

This document contains vocational education program course standards (curriculum frameworks and student performance standards) for exploratory courses, practical arts courses, and job preparatory programs offered at the secondary and postsecondary level as part of the public service education component of Florida's comprehensive vocational education program. Curriculum frameworks are provided for 40 programs: exploration of public service occupations; principles of public service; bail bonding; civil engineering aide; civil engineering technology; correctional auxiliary officer; correctional officer; correctional probation officer; criminal justice assisting; criminal justice technology; emergency administration and management; environmental science technology; fire fighting; fire science technology; instructional services technology; interpreter training program for hearing impaired; law enforcement; law enforcement auxiliary officer; legal assisting; private security officer; public administration supervision; public administration technology; public safety telecommunication; public service cooperative education; recreation technology; sign language communication; social services technology; solid waste disposal operation; teacher assisting; traffic accident investigation; urban planning technology; volunteer fire fighting; wastewater treatment plant operation; water and wastewater technology; and water treatment plant operation. Each curriculum framework includes some or all of the following: program title, occupational area, grade level, length, certification awarded; major concepts/content covered in the course; laboratory activities; special notes; and intended outcomes. (MN)

VOCATIONAL EDUCATION PROGRAM COURSES STANDARDS

July 1997

Public
Service
Education

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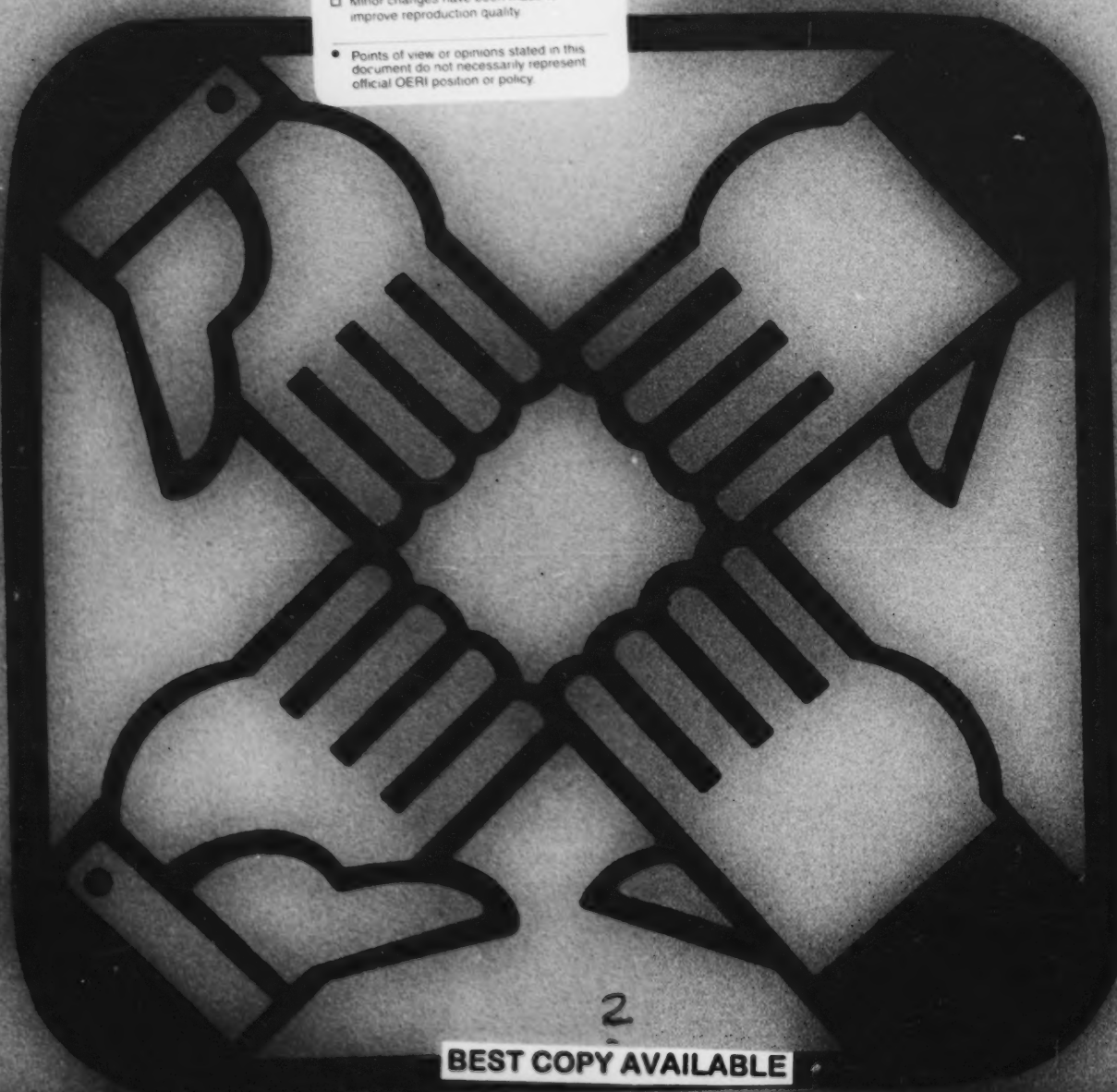
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**VOCATIONAL EDUCATION
PROGRAM COURSES STANDARDS
PUBLIC SERVICE EDUCATION**

JULY 1997

FLORIDA DEPARTMENT OF EDUCATION

Division of Applied Technology and Adult Education

**Bureau of System Implementation and Technical
Assistance for Vocational, Adult and Community
Tallahassee, Florida 32399-0400**

904/487-9538

FOREWORD

Section 228.041 Florida Statutes defines vocational education as meaning that instruction not necessarily leading to a baccalaureate degree, either graded or ungraded, listed below:

1. Job/preparatory programs designed to provide students with the minimum competencies necessary for effective entry into an occupation;
2. Exploratory courses designed to give students initial exposure to the skills and aptitudes associated with a broad range of occupations in order to assist them in making informed decisions regarding their future academic and occupational goals;
3. Supplemental programs designed to enable persons who are or have been employed in an occupation to upgrade their competencies in order to reenter or maintain employment or advance within their current occupation;
4. Practical arts courses designed to teach students practical generic skills which, though applicable to some occupations, are not designed to prepare students for entry into a specific occupation; or
5. Instruction which integrates the basic academic skills and vocational skills.

This document contains vocational education program courses standards (curriculum frameworks and students performance standards) for exploratory courses, practical arts courses and job preparatory programs offered at the secondary or postsecondary level as a part of Florida's comprehensive vocational education program. Vocational education program courses standards are established pursuant to section 239.205, Section 233.011, and Section 232.2454, Florida Statutes, for school districts and community colleges. State Board of Education Rule 6A-6.0571, Criteria for Qualification of Special Vocation-Technical Education Program Courses, provides the basis for the development and dissemination of this document.

Each program courses standard is composed of two parts: a curriculum framework and student performance standards. The curriculum framework includes four major sections: major concepts/content, laboratory activities, special notes, and intended outcomes. Student performance standards are listed for each intended outcome.

The standards do not prescribe how instruction should be delivered since decisions relative to the delivery of instruction must be made by school districts and community colleges within the context of local conditions. The Division of Applied Technology and Adult Education, Florida Department of Education, supports the belief that competency-based vocational education is the most effective means of providing programs and courses that conform to these established standards.

Program and course standards are based upon competencies required for entry, advancement, and upgrading occupations in the vocation program areas of Agriculture, Business, Marketing and Diversified, Health Occupations, Home Economics, Technology, Industrial, Marketing, and Public Service Education. Standards for courses designed for handicapped, disadvantaged, and other special needs persons are also provided. The standards are reviewed annually and revised as needed based upon changes in occupations utilizing input from professional associations, state technical committees, and other representatives of the private sector.

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INTRODUCTION

PUBLIC SERVICE EDUCATION

Public Service Education comprises the body of subject matter and planned learning experience designed to prepare persons for selected occupations necessary to accomplish the mission of local, county, state, and federal governments. When private enterprise fails to provide adequate services, publicly institutionalized solutions are found. In most instances, local governments are called upon to develop solutions. If counties or municipalities cannot achieve results, it may be necessary for state government to provide services needed by the public. Then, if state governments fail to deliver, the federal government inherits the responsibility. However, more and more frequently a combination of local, state, and federal involvement is necessary to cope with the needs of the public and the environment.

The rapid growth in population over the past years and the resulting urbanization, with its social, economic, and ecological problems, have required that expanded services in the public interest be provided. This has made the development of public service education programs a necessity. The programs may be grouped into the following cluster areas: Instructional Services, Environmental Technologies, Practical Arts, Criminal Justice, Fire Fighting, and Public Administration.

Regulatory procedures involving licensure, certification, or registration in certain public service occupation have been established which affect education program operation. State licensure is required for the occupations of Water and Wastewater Treatment Plant Operator, Correctional Officer, Correctional Probation Officer, Fire Fighting, Law Enforcement Officer, Private Security Guard, and Bail Bonding.

The Public Service Education programs may be subdivided into three main levels of purpose. The exploration courses offered in grades 6-9 are designed to provide students with an overview of the public service delivery system to enable them to make informed and meaningful choices of occupations in the public service field. The Practical Arts courses offered in grades 9-12 are designed to: teach students practical generic skills which, though applicable to some occupations, are not designed to prepare students for entry into a specific occupation. The Job Preparatory programs are designed to provide knowledge and skills that prepare students for employment in a specific public service occupation, such as correctional officer, or in a cluster of related occupations.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice.

Public Service Education program courses include instruction related to the free enterprise system and to consumer education. This instruction is designed to make the students aware that the free enterprise or competitive economic system exists as the prevailing economic system in the United States.

Also, in regard to consumer education, instruction is provided to help students become more knowledgeable in acquiring goods, services, and credit in the most economical and effective manner.

The vocational student organization, Florida Association of Public Service Education Students is an appropriate method of providing leadership training experience and for reinforcing specific knowledge and skills in the Public Service Education programs. The activities of the organization, when provided, must be an integral part of the specific program and must complement the objectives of the program.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Exploration Of Public Service Occupations
Occupational Area: Public Service Occupations

Secondary

Program Numbers 8900210
CIP Number 0743.9999EX
Grade Level 6-9, 30, 31
Length 0.5 credits
Certification TEC CONSTR @7 G
TEC CHEM @7 G
ANY PUBLIC SERV OCC ED G

- I. **MAJOR CONCEPTS/CONTENT:** The exploratory program course is designed to provide experiences to acquaint students with careers in public service occupations. The student completing the program course is not prepared for employment in a specific public service occupation. The program course at the exploratory level provides students the opportunity to examine the broad field of public service occupations, and to explore in greater detail information regarding specific employment opportunities available in the public service occupations.

The content should include, but not be limited to, the following career clusters: education and information services; natural resource management; public administration; social and economic services; urban, rural and community development; transportation industry; public safety, corrections and judicial services; national defense occupations. Basic computer literacy, employability skills, and leadership and human relation skills are an integral part of this program.

Reinforcement of basic skills in English, mathematics, reading and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Special projects that are related to each cluster are provided, i.e., role playing activities related to specific careers. Other activities for specific careers could be as follows: Natural resources - development of topographical lay-outs; Education and information services - develop and present mini lesson plans; Public administration - mock legislative forums; Social and economic services - develop a case study plan for a client using available community resources; Urban, rural and community development - design a zoning plan for development of a community; Transportation industry - administer a written mini driver's examination; Public safety - perform a police field interrogation.

III. **SPECIAL NOTE:** Guest speakers from public service make an important contribution to the effectiveness of this program. Additional enrichment opportunity: all career clusters include many employment opportunities in the private sector, i.e., lawyers, security guards, asset loss managers, etc.

IV. **INTENDED OUTCOMES:** After successfully completing this course, the student will be able to:

- 01.0 Describe the legal and ethical responsibilities of public service.
- 02.0 Describe the varied occupation opportunities available in the career clusters.
- 03.0 Identify the educational requirements for entry into specific occupations within the career clusters.
- 04.0 Discuss the general characteristics of Public Service Career Clusters.
- 05.0 State the fundamentals of employability skills.
- 06.0 Demonstrate computer literacy.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Exploration Of Public Service Occupations
Secondary Number: 8900210
Postsecondary Number:

- 01.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF PUBLIC SERVICE OCCUPATIONS--The student will be able to:
- 01.01 Define democracy.
 - 01.02 State three responsibilities and three rights of citizen of a democracy.
 - 01.03 Explain the purpose of laws and regulations.
 - 01.04 Describe how laws are enacted.
 - 01.05 Describe the major function of the three branches of the Federal/State governments.
- 02.0 DESCRIBE THE VARIED OCCUPATION OPPORTUNITIES AVAILABLE IN THE CAREER CLUSTERS--The student will be able to:
- 02.01 List at least three occupations for each of the career clusters.
 - 02.02 State the various agencies which might employ persons in the above occupations.
- 03.0 IDENTIFY THE EDUCATIONAL REQUIREMENTS FOR ENTRY INTO SPECIFIC PUBLIC SERVICE OCCUPATIONS WITHIN THE CAREER CLUSTERS--The student will be able to:
- 03.01 Describe the qualifications for the various entry levels of two selected occupational fields.
 - 03.02 Identify school subjects that will prepare for entry level employment in previously identified fields.
 - 03.03 Develop a long range career plan for a selected occupation.
- 04.0 DISCUSS THE GENERAL CHARACTERISTICS OF PUBLIC SERVICE CAREER CLUSTERS--The student will be able to:
- 04.01 List at least three occupations for each of the career clusters.
 - 04.02 Discuss the characteristics of at least one of the occupations listed including the following factors: employment outlook, salary benefits, fringe benefits, working conditions, career advancement/mobility, licensure/certification requirements, recommended qualifications.
 - 04.03 Describe safety habits applicable to three occupations.
- 05.0 STATE THE FUNDAMENTALS OF EMPLOYABILITY SKILLS--The student will be able to:
- 05.01 Define communication.

- 05.02 List three basic components of communications (sender, message, receiver).
- 05.03 Recognize and demonstrate verbal and nonverbal communication.
- 05.04 Complete application for social security number.
- 05.05 Complete basic job application.
- 05.06 Role play a job interview.
- 05.07 Develop a healthy work attitude by following class rules and regulations.

06.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

- 06.01 Define the following terms:
 - 01. computer;
 - 02. data;
 - 03. input;
 - 04. output;
 - 05. hardware
 - 06. software;
 - 07. languages;
 - 08. word processing and data processing;
 - 09. ROM memory and RAM memory;
 - 10. program;
 - 11. terminal;
 - 12. peripheral devices;
 - 13. keyboard characters, and
 - 14. control.
- 06.02 Operate a computer by performing the following steps:
 - 01. turn the equipment on and off
 - 02. load a program
 - 03. Run and use a program
 - 04. store a program
 - 05. display a program
 - 06. enter and execute a simple program
- 06.03 Identify the safety precautions that must be observed in caring for and using equipment.
- 06.04 Describe the general use of computer technology in public service occupations.
- 06.05 Discuss the advantages and disadvantages in the use of different computers.
- 06.05 Use the computer to explore selected occupations.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Principles of Public Service
Occupational Area: Public Service Occupations

Secondary

Program Numbers 8900330
CIP Number 0743.9997PA
Grade Level 9-12, 30, 31
Length 1 credit
Certification ANY PUBLIC SERV OCC ED G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this course is to provide students with competencies related to a cluster of public service job preparatory programs and to help students develop skills, knowledge and attitudes necessary for success and advancement in a specialized public service job preparatory program.

Content includes, but is not limited to: employability skills, safe and efficient work practices, communication skills, human relations, leadership skills, first aid, disease prevention, community safety, and crime prevention.

Reinforcement of basic skills in English, mathematics, reading and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory experiences are an integral part of this course.
- III. **SPECIAL NOTE:** Florida Public Service Association, is the appropriate vocational student organization for providing leadership training and reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.
- IV. **INTENDED OUTCOMES:** After successfully completing this course, the student will be able to:
- 01.0 Demonstrate employability skills.
 - 02.0 Demonstrate computer literacy.
 - 03.0 Demonstrate leadership skills.
 - 04.0 Demonstrate basic skills in mathematics and language arts.
 - 05.0 Perform basic first aid skills, including CPR.
 - 06.0 Discuss blood borne pathogens including AIDS and Hepatitis-B.

- 07.0 Demonstrate knowledge of common personal protective activities.
- 08.0 Discuss the services of employees in resources management.
- 09.0 Discuss the services of employees in educational services.
- 10.0 Discuss the services of employees in government agency management.
- 11.0 Discuss the services of employees in public safety and criminal justice system.
- 12.0 Discuss the services of employees in rural and urban community development.
- 13.0 Discuss the services of employees in transportation services, social and economic services, and regulatory and record services.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Principles Of Public Service
Secondary Number: 8900330
Postsecondary Number:

01.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 01.01 Conduct a job search.
- 01.02 Secure information about a job.
- 01.03 Identify documents that may be required when applying for a job.
- 01.04 Complete a job application.
- 01.05 Demonstrate competence in job interview techniques.
- 01.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 01.07 Identify acceptable work habits.
- 01.08 Demonstrate knowledge of how to make job changes appropriately.
- 01.09 Demonstrate acceptable employee health habits.

02.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

- 02.01 Discuss computer terms applicable to available hardware.
- 02.02 Demonstrate operation of available software programs.
- 02.03 Identify the safety precautions to be used in the care and use of computer equipment.
- 02.04 Discuss the potential uses and operations of computers in the Information Age.

03.0 DEMONSTRATE LEADERSHIP SKILLS--The student will be able to:

- 03.01 List the officers of an organization and the responsibilities of each office.
- 03.02 Conduct a typical business meeting.
- 03.03 Demonstrate a knowledge of parliamentary procedure.
- 03.04 Identify the functions of a committee.
- 03.05 List the rights and responsibilities of an individual member.
- 03.06 Prepare an agenda, a secretary's report, a treasurer's report, and a committee report.
- 03.07 Follow directions.
- 03.08 Demonstrate integrity, loyalty, dependability, and punctuality.

04.0 DEMONSTRATE BASIC SKILLS IN MATHEMATICS AND LANGUAGE ARTS--The student will be able to:

- 04.01 Demonstrate ability to draw, read, analyze, and report graphs, charts and tables.
- 04.02 Demonstrate ability to measure time, temperature, distance, capacity and weight.
- 04.03 Demonstrate ability to make estimates and appropriately judge the result.
- 04.04 Prepare a written report, including at least three paragraphs.

- 04.05 Deliver an oral report in a classroom setting.
- 04.06 Demonstrate note taking abilities.
- 04.07 Demonstrate appropriate telephone etiquette.
- 05.0 PERFORM BASIC FIRST AID SKILLS, INCLUDING CPR--The student will be able to:
 - 05.01 Demonstrate personal hygiene.
 - 05.02 Discuss appropriate steps to ensure safety and triage in emergency situations.
 - 05.03 Discuss first aid for severe and minor bleeding.
 - 05.04 Discuss first aid for compound and simple fractures.
 - 05.05 Discuss first aid for poisons and other hazardous materials.
 - 05.06 Discuss first aid for open and closed wounds.
 - 05.07 Discuss first aid for internal and head pains.
 - 05.08 Discuss first aid for an unconscious person.
 - 05.09 Demonstrate artificial respiration.
 - 05.10 Demonstrate cardiopulmonary resuscitation (CPR).
 - 05.11 Activate local emergency medical system (EMS).
- 06.0 DISCUSS BLOOD BORNE PATHOGENS INCLUDING AIDS AND HEPATITIS-B--The student will be able to:
 - 06.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens.
 - 06.02 Identify community resources and services available to individuals with diseases caused by blood borne pathogens.
 - 06.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of diseases caused by blood borne pathogens.
 - 06.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
 - 06.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.
- 07.0 DEMONSTRATE KNOWLEDGE OF COMMON PERSONAL PROTECTIVE ACTIVITIES--The student will be able to:
 - 07.01 Identify hazards that may exist in houses.
 - 07.02 Identify methods of eliminating hazards in the houses.
 - 07.03 Develop a house checklist for determining fire hazards.
 - 07.04 Develop a home family evacuation plan.
 - 07.05 Explain the use of a home fire extinguisher.
 - 07.06 Explain the purpose and operation of home alarms.
 - 07.07 Explain methods of securing a home, including doorways and window locks.
 - 07.08 Complete a home safety and security survey.
 - 07.09 Explain responsible citizenship.
 - 07.10 Explain the value of community participation.
 - 07.11 Discuss citizen crime watch programs.
 - 07.12 Activate local emergency services (police and fire).

- 08.0 DISCUSS THE SERVICES OF EMPLOYEES IN RESOURCES MANAGEMENT--The student will be able to:
- 08.01 Discuss careers in resources management.
 - 08.02 Describe career opportunities upon completion of Environmental Specialist secondary program.
 - 08.03 Describe career opportunities upon completion of local and state postsecondary resources management programs.
 - 08.04 Explain purpose of solid waste, water, and wastewater treatment plants.
 - 08.05 Describe the role of federal, state, and local environmental pollution control agencies.
 - 08.06 Describe how pesticides pollute deep and shallow wells.
 - 08.07 Explain the purpose of community recreational facilities.
 - 08.08 List local, state, and federal parks and recreational facilities.
- 09.0 DISCUSS THE SERVICES OF EMPLOYEES IN EDUCATIONAL SERVICES--The student will be able to:
- 09.01 Discuss careers in educational services.
 - 09.02 Describe career opportunities upon completion of Teacher Assisting secondary program.
 - 09.03 Describe career opportunities upon completion of local and state postsecondary educational services programs.
 - 09.04 Discuss the emergence of the Information Age.
 - 09.05 Discuss the concept of life-long learning.
 - 09.06 Discuss the concepts of teacher certification, student evaluation, teacher accountability, and performance standards.
 - 09.07 Prepare a mini-class.
 - 09.08 Lead a group discussion.
- 10.0 DISCUSS THE SERVICES OF EMPLOYEES IN GOVERNMENT AGENCY MANAGEMENT--The student will be able to:
- 10.01 Discuss careers in government agency management.
 - 10.02 Describe career opportunities upon completion of local and state postsecondary government agency management programs.
 - 10.03 Define the concepts of: community, democracy, special interest organizations, fiscal control and accountability, taxation, appointment, and labor relations.
 - 10.04 Describe the process of an idea becoming a law in local, state, and federal jurisdiction.
- 11.0 DISCUSS THE SERVICES OF EMPLOYEES IN PUBLIC SAFETY AND CRIMINAL JUSTICE SYSTEM--The student will be able to:
- 11.01 Discuss careers in public safety and criminal justice system.
 - 11.02 Describe career opportunities upon completion of Criminal Justice Assisting.
 - 11.03 Describe career opportunities upon completion of Private Security Guard.
 - 11.04 Describe career opportunities upon completion of Fire Fighting.

- 11.05 Describe career opportunities upon completion of Fire Service Aide.
 - 11.06 Describe career opportunities upon completion of Volunteer Fire Fighting.
 - 11.07 Describe career opportunities upon completion of local and state postsecondary Public Safety and Criminal Justice System programs.
 - 11.08 Describe local community safety services.
 - 11.09 Discuss the basics of constitutional law.
 - 11.10 Describe the branches of the criminal justice system.
 - 11.11 Discuss the jurisdiction of local, state, and federal criminal justice systems.
 - 11.12 Describe the process from initial crime incident reporting to release of perpetrators from prison.
 - 11.13 Discuss the authority of criminal justice personnel to use of force.
 - 11.14 Discuss the basics of investigation.
- 12.0 DISCUSS THE SERVICES OF EMPLOYEES IN RURAL AND URBAN COMMUNITY DEVELOPMENT--The student will be able to:
- 12.01 Discuss careers in rural and urban community development.
 - 12.02 Describe career opportunities upon completion of Civil Engineering Aide.
 - 12.03 Describe career opportunities upon completion of local and state postsecondary programs in rural and urban community development.
 - 12.04 Discuss the local zoning board philosophy.
 - 12.05 Discuss the need for public services allocation and planning.
 - 12.06 Explain the interrelation of local, state, and national public services.
- 13.0 DISCUSS THE SERVICES OF EMPLOYEES IN TRANSPORTATION SERVICES, SOCIAL AND ECONOMIC SERVICES, AND REGULATORY AND RECORD SERVICES--The student will be able to:
- 13.01 Discuss careers in transportation services, social and economic services, and regulatory and record services.
 - 13.02 Describe career opportunities upon completion of local and state postsecondary programs in transportation services, social and economic services, and regulatory and record services.
 - 13.03 Describe the social services available in the local community.
 - 13.04 Explain the procedures necessary to access the local social services.
 - 13.05 Describe institutional care available locally for the elderly.
 - 13.06 Describe institutional care available locally for the mentally disadvantaged.
 - 13.07 Describe institutional care available locally for the physically disadvantaged.
 - 13.08 Discuss access for legal counseling in the local community.
 - 13.09 Discuss access for economic assistance programs in the local community.
 - 13.10 Define child abuse, child neglect, dependency, delinquency, and truancy.

- 13.11 Discuss local help available for suicide counseling, abuse counseling, and sexual assault counseling.
- 13.12 Discuss the regulatory functions of the Department of State.
- 13.13 Describe the process in obtaining a fishing license, a private security guard license, and a voter's registration card.
- 13.14 Discuss the record functions of the local county clerk.
- 13.15 Describe the process in obtaining a birth certificate and a marriage license.
- 13.16 Discuss the operations of the Department of Transportation.
- 13.17 Discuss the privilege of obtaining a Florida Driver's License.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Bail Bonding
Occupational Area: Public Service Occupations

PSAV

Program Numbers P430135
CIP Number 0743.010903
Grade Level 30, 31
Length 80 hours
Certification LAW ENF @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as surety or bonding agents (186.267-010) or to provide supplemental training for persons previously or currently employed in this occupation. The program prepares students for certification as bail bonding agents in accordance with Section 648.34, Florida Statutes.

The content includes, but is not limited to, introduction to the criminal justice system; duties of surety and bail bonding agents; bail bonding process, bail bond laws and regulations; contract law, civil and criminal laws, laws of arrest and arrest techniques, judgments and indemnifications, courtroom organization, community relations, employability skills, and firearm safety.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities are an integral part of this program for bail bonding process, arrest techniques, and firearm safety. Access to a firing range is required for firearm safety training.

The Criminal Justice Standards and Training Commission Policy Manual states that the teacher/student ratio must be no more than 1:6 on the firing range.

- III. **SPECIAL NOTE:** A certification of completion of the prescribed program must be sent to the Bureau of Licensing, Department of Insurance, Larson Building, Tallahassee, Florida 32301 in order for the students to take the Florida Bail Bondsman examination.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040 F.A.C., the minimum basic skills grade level required for

this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 80 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Describe the components and goals of and career opportunities in the criminal justice system.
- 02.0 Discuss suretyship.
- 03.0 Perform duties and functions of bail bonding agents.
- 04.0 Discuss the nature of bail and the bonding process.
- 05.0 Identify bail bond laws, rules, and regulations.
- 06.0 Describe the licensing and regulations of bonding agents and regulations of rates and underwriting.
- 07.0 Identify the principles of contract law and the basic concepts.
- 08.0 Differentiate between civil law and criminal law.
- 09.0 Discuss laws of arrest.
- 10.0 Demonstrate arrest technique and procedures.
- 11.0 Describe judgments and indemnifications.
- 12.0 Explain court organization and courtroom demeanor.
- 13.0 Describe community relations affecting bonding agents.
- 14.0 Demonstrate employability skills.
- 15.0 Demonstrate firearm safety.
- 16.0 Demonstrate an understanding of entrepreneurship.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Bail Bonding
Secondary Number:
Postsecondary Number: P430135

01.0 DESCRIBE THE COMPONENTS AND GOALS OF AND CAREER OPPORTUNITIES IN THE CRIMINAL JUSTICE SYSTEM--The student will be able to:

- 01.01 Define criminal justice system.
- 01.02 Describe components and goals of criminal justice system.
- 01.03 Describe career opportunities in criminal justice system.

02.0 DISCUSS SURETYSHIP--The student will be able to:

- 02.01 Describe the historical development and importance of suretyship and the legal and equitable rights of the surety.
- 02.02 List the general principles of suretyship.
- 02.03 State the relationship between suretyship and risk.
- 02.04 Describe the legal and equitable fundamentals of suretyship.
- 02.05 Define the basic terms related to bonding, Personal Surety, and Corporate Suretyship.

03.0 PERFORM DUTIES AND FUNCTIONS OF BAIL BONDING AGENTS--The student will be able to:

- 03.01 Complete forms used to execute bail bond.
- 03.02 Fill out application for bail forms.
- 03.03 Complete Indemnity Agreement.
- 03.04 Prepare daily bond register.
- 03.05 Prepare individual file for clients.
- 03.06 Give prenumbered receipts, premium and escrow.
- 03.07 Monitor and update court docket book.
- 03.08 Describe entrepreneur activities of bail bonding.
- 03.09 Discuss posting an appeal bond, law, Chapter 924.15.

04.0 DISCUSS THE NATURE OF BAIL AND THE BONDING PROCESS--The student will be able to:

- 04.01 Define and classify Judicial Bonds and list their typical features.
- 04.02 Explain court bonds.
- 04.03 Describe the "Statute of Fraud."
- 04.04 Discuss the Florida Constitution, the Judicial System and the bonding process.
- 04.05 List what persons are entitled to bail.
- 04.06 Give the title of the person who may fix and approve bail.
- 04.07 Describe "Admission to Bail."
- 04.08 List persons who may and may not give bail.
- 04.09 Describe the undertaking: it's fulfillment and forfeiture, it's form and substance.

- 04.10 Discuss the financial qualifications of sureties and the substance of bail.
- 04.11 Describe the "Arrest and Surrender of the principle, and Estreat: forfeiture and its enforcement."
- 04.12 List the possible defects in the undertaking and describe the cancellation process.
- 04.13 Describe the process of appeal giving the time limit for making an appeal and listing the courts that hear appeals.
- 04.14 Describe the stay of execution, the appeal of bonds and explain when the defendant is insolvent and describe the breach of the undertaking.
- 04.15 Define a supersedeas bond and list the conditions calling for a Writ of Supersedeas.
- 04.16 Define Habeas Corpus Bonds, Extradition Bonds, Ne Exeat Bonds, Civil Contempt Bonds and Fine and Costs Bonds. Discuss the Writ of NeExeat in Florida, the plaintiff's and the defendants NeExeat bond.

05.0 IDENTIFY BAIL BOND LAWS, RULES, AND REGULATIONS--The student will be able to:

- 05.01 Discuss Chapter 903, Florida Statutes (bail).
- 05.02 Discuss Chapter 648, Florida Statutes, regulation of bail bondsmen and runners.
- 05.03 Describe the rules written by the Insurance Commissioner to implement Chapter 903 and F.S. 648.

06.0 DESCRIBE THE LICENSING AND REGULATIONS OF BONDING AGENTS AND REGULATIONS OF RATES AND UNDERWRITING--The student will be able to:

- 06.01 Explain the reasons for licensing and regulation of bondspersons.
- 06.02 List all the general requirements for licensure, and list the reasons a license may be denied, suspended, or not renewed.
- 06.03 Discuss the license fees and taxes and tell for what these funds are used by the state.
- 06.04 Give the reasons for the regulation of trade practices, investments, and rates.
- 06.05 List the acts which are prohibited.
- 06.06 Describe the areas of regulation and discuss State versus Federal regulation and explain the function of the Insurance Commissioner.
- 06.07 Describe the licensing of the companies and their examination.
- 06.08 Tell what is meant by underwriting.

07.0 IDENTIFY THE PRINCIPLES OF CONTRACT LAW AND THE BASIC CONCEPTS--The student will be able to:

- 07.01 Define the Common Law and list its effects.
- 07.02 Discuss the court's interpretation of surety bonds.
- 07.03 List the basic concepts of general contract law.
- 07.04 Explain the essentials of contract.
- 07.05 Explain what is meant by Utmost Good Faith, Fraud, Power of Attorney, Misrepresentation.

- 07.06 Discuss the enforcability of contracts.
- 07.07 Define statutory law.
- 08.0 DIFFERENTIATE BETWEEN CIVIL LAW AND CRIMINAL LAW--The student will be able to:
 - 08.01 Identify the difference between civil law and criminal law, case law, constitutional law and state statutes.
 - 08.02 Describe the agents liability for client injury, compensatory or punitive damages.
 - 08.03 List the courts of civil law.
 - 08.04 Discuss intentional torts, Malicious Prosecution Action and list the six elements in posing a Mal Pro Action.
 - 08.05 Describe 10 concepts of a civil suit.
 - 08.06 Define priviledged information and discuss the implications as applied to agent and client, attorney and client, and agent and attorney.
 - 08.07 Define felony, misdemeanor, traffic offenses and infractions.
- 09.0 DISCUSS LAWS OF ARREST--The student will be able to:
 - 09.01 Discuss laws of arrest, bail jumping, and bail-skip tracking techniques.
 - 09.02 Describe case law relating to right to arrest.
 - 09.03 Describe Florida Statute 903.21, 903.22, and 903.29.
 - 09.04 List and describe the importance of positive identification of defendant, the value of certified copy of the bond, the agents right to delegate power of arrest, the care, custody and control of defendant after arrest by surety.
 - 09.05 Discuss the liability in case of false arrest.
- 10.0 DEMONSTRATE ARREST TECHNIQUE AND PROCEDURES--The student will be able to:
 - 10.01 Describe the basic elements of crime.
 - 10.02 Perform mock arrest techniques, and search and seizure.
 - 10.03 Apply handcuffs, check for weapons.
 - 10.04 Identify the legal and ethical aspects of firearms.
 - 10.05 Identify the civil liability of agent in case of a shooting.
 - 10.06 Perform basic unarmed defense techniques.
 - 10.07 Discuss Actus Reaus in terms of voluntary acts, what if forbidden by law, and negative acts.
 - 10.08 Discuss Mens rea and Se Inter.
 - 10.09 Define "intent."
 - 10.10 Explain liabilities for crimes of others (18 U.S. Code section 2, and F.S. Chapter 843).
 - 10.11 Define forgery (Chapter 831.01 F.S.).
- 11.0 DESCRIBE JUDGMENTS AND INDEMNIFICATIONS--The student will be able to:
 - 11.01 Discuss judgements and indemnifications.
 - 11.02 Describe the procedures to vacate final judgements.
 - 11.03 Define collateral and list its types and dangers of.
 - 11.04 Summarize FS Chapter 903.14.

- 12.0 EXPLAIN COURT ORGANIZATION AND COURTROOM DEMEANOR--The student will be able to:
- 12.01 Identify the types of courts and their organization and control.
 - 12.02 Explain the facets of courtroom demeanor important to surety agents.
 - 12.03 Define perjury.
- 13.0 DESCRIBE COMMUNITY RELATIONS AFFECTING BONDING AGENTS--The student will be able to:
- 13.01 Describe the civic responsibilities of surety agents and public officials.
 - 13.02 Identify appropriate relationships between agent and client, client's family, indemnitor, court system personnel, attorney, and police officers.
 - 13.03 Identify different ways to improve a bondsperson's image in the community.
- 14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 14.01 Conduct a job search.
 - 14.02 Secure information about a job.
 - 14.03 Identify documents that may be required when applying for a job.
 - 14.04 Complete a job application.
 - 14.05 Demonstrate competence in job interview techniques.
 - 14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 14.07 Identify acceptable work habits.
 - 14.08 Demonstrate knowledge of how to make job changes appropriately.
 - 14.09 Demonstrate acceptable employee health habits.
- 15.0 DEMONSTRATE FIREARM SAFETY--The student will be able to:
- 15.01 Identify basic rules of handling firearms and the laws governing them in Florida.
 - 15.02 Perform safe handling of firearms.
- 16.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
- 16.01 Define entrepreneurship.
 - 16.02 Describe the importance of entrepreneurship to the American economy.
 - 16.03 List the advantages and disadvantages of business ownership.
 - 16.04 Identify the risks involved in ownership of a business.
 - 16.05 Identify the necessary personal characteristics of a successful entrepreneur.
 - 16.06 Identify the business skills needed to operate a small business efficiently and effectively.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Civil Engineering Aide
Occupational Area: Public Service Occupations

Secondary

Program Numbers 8915000
CIP Number 0715.029901
Grade Level 9-12, 30, 31
Length 6 credits
Certification TEC CONSTR @7 G
TEC EN AID @7 G
SURVEYING @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for entry level employment as civil engineering aides or surveyors helpers (61081000) assisting civil engineers or urban planners or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, basic mathematical, scientific, or technical aspects of civil engineering or urban planning; beginning surveying, including mapping natural terrain; drafting; employability skills; health and safety including first aid and CPR; and communication skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

Listed below are the courses that comprise this program when offered at the secondary level:

8915010 - Civil Engineering Aide 1
8915020 - Civil Engineering Aide 2
8915030 - Civil Engineering Aide 3
8915040 - Civil Engineering Aide 4
8915050 - Civil Engineering Aide 5
8915060 - Civil Engineering Aide 6

- II. **LABORATORY ACTIVITIES:** Laboratory activities including basic civil drafting and blue print reading are an appropriate part of this program. Laboratory and field activities relating to surveying are required.
- III. **SPECIAL NOTE:** The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following

is required for each student: (1) a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks relevant to the student's career goal. The student must receive compensation for work performed.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Demonstrate employability skills.
- 02.0 Assist civil engineers in collecting and analyzing soil samples, surveying and mapping.
- 03.0 Assist urban planners in developing specifications and materials for special housing centers.
- 04.0 Demonstrate command of mathematical formulae for geometric designs.
- 05.0 Take photographs for legal uses.
- 06.0 Demonstrate beginning knowledge of drainage and geologic concepts.
- 07.0 Operate surveying instruments.
- 08.0 Prepare drawings and sketches.
- 09.0 Demonstrate basic communications skills.
- 10.0 Demonstrate basic math skills.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Civil Engineering Aide
Secondary Number: 8915000
Postsecondary Number:

- 01.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 01.01 Conduct a job search.
 - 01.02 Secure information about a job.
 - 01.03 Identify documents that may be required when applying for a job.
 - 01.04 Complete a job application.
 - 01.05 Demonstrate competence in job interview techniques.
 - 01.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 01.07 Identify acceptable work habits.
 - 01.08 Demonstrate knowledge of how to make job changes appropriately.
 - 01.09 Demonstrate acceptable employee health habits.
- 02.0 ASSIST CIVIL ENGINEERS IN COLLECTING AND ANALYZING SOIL SAMPLES, SURVEYING AND MAPPING--The student will be able to:
- 02.01 Prepare sample tags for test specimens.
 - 02.02 Show ability to take a disturbed soil sample.
 - 02.03 Properly hold level rod and the chain.
 - 02.04 Trace topographic map details.
- 03.0 ASSIST URBAN PLANNERS IN DEVELOPING SPECIFICATIONS AND MATERIALS FOR SPECIAL HOUSING CENTERS--The student will be able to:
- 03.01 Collect data for origin/destination studies.
 - 03.02 Collect traffic signal timing data.
 - 03.03 Perform traffic counts.
 - 03.04 Collect demographic data.
- 04.0 DEMONSTRATE COMMAND OF MATHEMATICAL FORMULAE FOR GEOMETRIC DESIGNS--The student will be able to:
- 04.01 Calculate missing elements of right triangles.
 - 04.02 Calculate volume and area of rectangles, squares, triangles, parallelograms, cylinders, cones, and spheres.
- 05.0 TAKE PHOTOGRAPHS FOR LEGAL USES--The student will be able to:
- 05.01 Take polaroid photographs.
 - 05.02 Take photographs with single lens reflex.
 - 05.03 Compose photographs.
- 06.0 DEMONSTRATE BEGINNING KNOWLEDGE OF DRAINAGE AND GEOLOGICAL CONCEPTS--The student will be able to:

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- 06.01 Demonstrate knowledge of a water budget.
- 06.02 Demonstrate knowledge of stream behavior.
- 06.03 Recognize soil types.

07.0 OPERATE SURVEYING INSTRUMENTS--The student will be able to:

- 07.01 Operate the following instruments:
 - a. Rod and Rod level.
 - b. Chain, thermometer, tension-pull, and barometer.
 - c. Set up engineers level.
 - d. Set up engineers transit.

08.0 PREPARE DRAWINGS AND SKETCHES--The student will be able to:

- 08.01 Demonstrate the ability to read and interpret civil engineering drawings.
- 08.02 Plot cross sections and profiles.
- 08.03 Trace cross section templates.
- 08.04 Plot lot boundaries.
- 08.05 Store and retrieve maps.

09.0 DEMONSTRATE BASIC COMMUNICATION SKILLS--The student will be able to:

- 09.01 Define unfamiliar civil engineering terms by use of structural analysis, decoding, contextual clues or by using a dictionary.
- 09.02 Distinguish factual reports and personal opinion.
- 09.03 Demonstrate ability to report observations in written or oral form.

10.0 DEMONSTRATE BASIC MATH SKILLS--The student will be able to:

- 10.01 Draw, read, and analyze and report on graphs, charts, and tables.
- 10.02 Measure time, temperature, distance, capacity and mass/weight.
- 10.03 Make and use measurements in both traditional and metric units.
- 10.04 Make estimates and approximations and judge the reasonableness of the result.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8915010
Course Title: Civil Engineering Aide 1
Course Credit: 1

COURSE DESCRIPTION:

This course provides basic mathematical, scientific, or technical aspects of civil engineering. Employability skills, health and safety including CPR are included.

01.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 01.01 Conduct a job search.
- 01.02 Secure information about a job.
- 01.03 Identify documents that may be required when applying for a job.
- 01.04 Complete a job application.
- 01.05 Demonstrate competence in job interview techniques.
- 01.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 01.07 Identify acceptable work habits.
- 01.08 Demonstrate knowledge of how to make job changes appropriately.
- 01.09 Demonstrate acceptable employee health habits.

02.0 ASSIST CIVIL ENGINEERS IN COLLECTING AND ANALYZING SOIL SAMPLES, SURVEYING AND MAPPING--The student will be able to:

- 02.01 Prepare sample tags for test specimens.
- 02.02 Show ability to take a disturbed soil sample.
- 02.03 Properly hold level rod and the chain.
- 02.04 Trace topographic map details.

04.0 DEMONSTRATE COMMAND OF MATHEMATICAL FORMULAE FOR GEOMETRIC DESIGNS--The student will be able to:

- 04.01 Calculate missing elements of right triangles.
- 04.02 Calculate volume and area of rectangles, squares, triangles, parallelograms, cylinders, cones, and spheres.

09.0 DEMONSTRATE BASIC COMMUNICATION SKILLS--The student will be able to:

- 09.01 Define unfamiliar civil engineering terms by use of structural analysis, decoding, contextual clues or by using a dictionary.
- 09.02 Distinguish factual reports and personal opinion.
- 09.03 Demonstrate ability to report observations in written or oral form.

10.0 DEMONSTRATE BASIC MATH SKILLS--The student will be able to:

- 10.01 Draw, read, and analyze and report on graphs, charts, and tables.
- 10.02 Measure time, temperature, distance, capacity and mass/weight.
- 10.03 Make and use measurements in both traditional and metric units.
- 10.04 Make estimates and approximations and judge the reasonableness of the result.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8915020
Course Title: Civil Engineering Aide 2
Course Credit: 1.

COURSE DESCRIPTION:

This course provides instruction in beginning surveying and drafting.
Communication skills are included.

05.0 TAKE PHOTOGRAPHS FOR LEGAL USES--The student will be able to:

- 05.01 Take polaroid photographs.
- 05.02 Take photographs with single lens reflex.
- 05.03 Compose photographs.

06.0 DEMONSTRATE BEGINNING KNOWLEDGE OF DRAINAGE AND GEOLOGICAL CONCEPTS--The student will be able to:

- 06.01 Demonstrate knowledge of a water budget.
- 06.02 Demonstrate knowledge of stream behavior.
- 06.03 Recognize soil types.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8915030
Course Title: Civil Engineering Aide 3
Course Credit: 1

COURSE DESCRIPTION:

This course provides laboratory experiences and begins preparing students for the practicum.

03.0 ASSIST URBAN PLANNERS IN DEVELOPING SPECIFICATIONS AND MATERIALS FOR SPECIAL HOUSING CENTERS--The student will be able to:

- 03.01 Collect data for origin/destination studies.
- 03.02 Collect traffic signal timing data.
- 03.03 Perform traffic counts.
- 03.04 Collect demographic data.

07.0 OPERATE SURVEYING INSTRUMENTS--The student will be able to:

- 07.01 Operate the following instruments:
 - a. Rod and Rod level.
 - b. Chain, thermometer, tensionpull, and barometer.
 - c. Set up engineers level.
 - d. Set up engineers transit.

08.0 PREPARE DRAWINGS AND SKETCHES--The student will be able to:

- 08.01 Demonstrate the ability to read and interpret civil engineering drawings.
- 08.02 Plot cross sections and profiles.
- 08.03 Trace cross section templates.
- 08.04 Plot lot boundaries.
- 08.05 Store and retrieve maps.

Program: 8915000 Civil Engineering Aide

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8915040

Course Title: Civil Engineering Aide 4

Course Credit: 1

COURSE DESCRIPTION:

This course is a practicum which covers all aspects of Civil Engineering Aide employment. Civil Engineering Aide 1, 2, and 3 are pre-requisite to this course.

Program: 8915000 Civil Engineering Aide

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8915050

Course Title: Civil Engineering Aide 5

Course Credit: 1

COURSE DESCRIPTION:

This course is a practicum which covers all aspects of Civil Engineering Aide employment. Civil Engineering Aide 1, 2, 3, and 4 are pre-requisite to this course.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8915060
Course Title: Civil Engineering Aide 6
Course Credit: 1

COURSE DESCRIPTION:

This course is a practicum which covers all aspects of Civil Engineering Aide employment. Civil Engineering Aide 1, 2, 3, 4, and 5 are pre-requisite to this course.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Civil Engineering Technology
Occupational Area: Public Service Occupations

PSV

CIP Number 0715.020101
Grade Level College Credits
Length AS Degree/ 63 Hours

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as surveyors (10081600), civil engineering technicians (22502224), or surveyors helpers (61081000) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, surveying, highway design, soils and foundations, photogrammetry, asphalt design, drainage and geology, concrete design, orientation to utilities, structural design, estimating, drafting, legal and ethical considerations, employability skills, leadership and human relations skills, health and safety, and supportive general education. Computer use is essential. Technical report writing, record keeping and mathematical computations are important aspects of this occupation.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities are an integral part of this curriculum.
- III. **SPECIAL NOTE:** Leadership skills are enhanced through student membership in the Florida Engineering Society, American Society of Civil Engineering Technicians, or the Florida Society of Professional Land Surveyors. Such membership should be encouraged. Upon graduation, completers are eligible to take the National Certification Examination for Civil Engineering Technicians. After eight years of experience the graduate becomes eligible for the land surveying certification examination of Florida's Department of Professional Regulation.

The Florida State Board of Professional Land Surveyors, Department of Professional Regulation, approves programs of land surveyors. Graduates of these programs are then eligible, with four years of experience, to sit for the land surveying certification examination.

The cooperative method of instruction may be used for this program. When the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

This program/course should be reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Solve general, technical, and engineering type problems.
- 02.0 Write, modify and run basic programs on microcomputers.
- 03.0 Use the computer as an aid to drafting.
- 04.0 Use instruments to construct engineering, mechanical, and geometrical type drawings.
- 05.0 Sketch, letter, and generate linework to describe various objects.
- 06.0 Read and produce drawings (orthographic) involving orthographic projection, sections, pictorial, and auxilliary views.
- 07.0 Use practical concepts studied in human relations to on-the-job application in business and industry.
- 08.0 Solve problems involving plane trigonometry.
- 09.0 Solve typical engineering strength of materials problems.
- 10.0 Recognize the use of the various materials in the construction industry.
- 11.0 Utilize standard surveying equipment to make measurements and calculations to run a traverse, establish levels, keep notes, and produce required drawings.
- 12.0 Recognize the use of the various materials of selected industries.
- 13.0 Produce drawings involving standard equipment and computers.
- 14.0 Solve engineering graphics problems using standard techniques and reference materials.
- 15.0 Analyze physical and mechanical properties of soil and concrete.
- 16.0 Solve basic hydraulic problems using the theory of incompressible fluids.
- 17.0 Solve problems using theories learned in engineering mechanics.
- 18.0 Establish grades, locate property lines, and utilities; and produce plots and calculate cut and fill by average-end-area.
- 19.0 Demonstrate employability skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Civil Engineering Technology
Secondary Number:
Postsecondary Number: 0715.020101

01.0 SOLVE GENERAL, TECHNICAL, AND ENGINEERING TYPE PROBLEMS--The student will be able to:

- 01.01 Given two pieces of data concerning a right triangle, compute the missing sides and/or angles.
- 01.02 Given necessary data concerning polygons, compute the area.
- 01.03 Given three pieces of data concerning an oblique triangle, compute the missing sides and angles.
- 01.04 Given necessary data concerning an oblique triangle, compute the area.
- 01.05 Given a line graph and one piece of data (ordinate or abscissa) solve for missing ordinate or abscissa data.
- 01.06 Read and interpret engineering related graphs.

02.0 WRITE, MODIFY AND RUN BASIC PROGRAMS ON MICROCOMPUTERS--The student will be able to:

- 02.01 Use computers programmed in a basic language.
- 02.02 Write, using a desk top computer loop programs for a single input and a single output.
- 02.03 Write, using a desk top computer loop programs for multiple entry and multiple output.
- 02.04 Use HP hand-held 41-CX or equal computer to write loop programs for single input and single output.
- 02.05 Use HP hand-held 41-CX or equal computer to write loop programs for multiple entry and multiple output.
- 02.06 Using a desk-top computer and surveying/engineering canned software, solve engineering and surveying type problems, such as plats, and direction traverses with corrections.
- 02.07 Using HP hand-held 41-CX computer or equal and surveying/engineering canned software, solve engineering and surveying type problems such as plats, and direction traverses with corrections.

03.0 USE THE COMPUTER AS AN AID TO DRAFTING--The student will be able to:

- 03.01 Use COGO programs to plot surveying/engineering problems.
- 03.02 Use coordinate data generated from desk top and HP hand-held 41-CX computers or equal to plot topographic maps, plats, roadway alignments, parking lots, subdivisions, and other appropriate civil engineering projects.

04.0 USE INSTRUMENTS TO CONSTRUCT ENGINEERING, MECHANICAL, AND GEOMETRICAL TYPE DRAWINGS--The student will be able to:

- 04.01 Use Leroy lettering set and reservoir technical pens to draft on various media topographic maps, plats, subdivisions, plans and profiles, and other appropriate civil engineering projects.
 - 04.02 Use a Polar planometer to determine areas for plats, drainage computations, and land planning.
 - 04.03 Use curve sets to draw plans and profiles.
 - 04.04 Use curve templates to draw plans and profiles.
 - 04.05 Demonstrate correct use of appropriate drafting instruments in given situations.
- 05.0 SKETCH, LETTER, AND GENERATE LINEWORK TO DESCRIBE VARIOUS OBJECTS--The student will be able to:
- 05.01 Prepare sketches and descriptions of real property.
 - 05.02 Use topographic map symbols including linework to enhance topographic maps.
 - 05.03 Use proper line symbols and notes from road design standards to prepare plans and profiles.
- 06.0 READ AND PRODUCE DRAWINGS (ORTHOGRAPHIC) INVOLVING ORTHOGRAPHIC PROJECTION, SECTIONS, PICTORIAL, AND AUXILLIARY VIEWS--The student will be able to:
- 06.01 Produce orthographic projections.
 - 06.02 Produce typical road cross section drawings.
 - 06.03 Produce auxiliary view drawings of utility conflicts.
- 07.0 USE PRACTICAL CONCEPTS STUDIED IN HUMAN RELATIONS TO ON-THE-JOB APPLICATION IN BUSINESS AND INDUSTRY--The student will be able to:
- 07.01 Adapt learnings to job situations.
 - 07.02 Recognize lines of authority from organizational charts.
 - 07.03 Modify language to work situations.
- 08.0 SOLVE PROBLEMS INVOLVING PLANE TRIGONOMETRY--The student will be able to:
- 08.01 Solve right triangle problems using sine, cosine, tangent and pythagorean theorem.
 - 08.02 Solve oblique triangle problems using the law of sines and the law of cosines.
 - 08.03 Compute areas of right and oblique triangles.
- 09.0 SOLVE TYPICAL ENGINEERING STRENGTH OF MATERIALS PROBLEMS--The student will be able to:
- 09.01 Calculate forces, and stresses in various structural members as determined by the material(s) used.
 - 09.02 Calculate the stresses in bolts and rivets and determine the number needed in different types of connections.
 - 09.03 Determine the centroid location of different cross-sectional shapes.
 - 09.04 Calculate a) moments of inertia, b) radius of gyration, and c) bending moments of beams.

- 09.05 Understand the appropriate engineering vocabulary and terminology.
- 09.06 Have a basic knowledge of the strengths of various engineering materials used in the design of machines and structures.
- 09.07 Understand the use of the universal testing machine.

10.0 RECOGNIZE THE USE OF THE VARIOUS MATERIALS IN THE CONSTRUCTION INDUSTRY-
-The student will be able to:

- 10.01 Write trip tickets, prepare delivery logs, and measure in-place materials.
- 10.02 Inspect placement and testing of storm sewer drainage pipe and gravity sewer pipe.
- 10.03 Inspect placement and test pressure pipe systems.
- 10.04 Run standard ASTM test of deformed steel bars and compute results.
- 10.05 Run standard ASTM test for flat stock and compute results.
- 10.06 Run standard ASTM test for standard 505 samples and compute results.
- 10.07 Run standard Rockwell hardness test.
- 10.08 Run standard ASTM test for shear and compute results.
- 10.09 Run standard ASTM test for compressive strength and compute results.
- 10.10 Run standard ASTM test for air entrainment.
- 10.11 Run standard ASTM test for volume.

11.0 UTILIZE STANDARD SURVEYING EQUIPMENT TO MAKE MEASUREMENTS AND CALCULATIONS TO RUN A TRAVERSE, ESTABLISH LEVELS, KEEP NOTES, AND PRODUCE REQUIRED DRAWINGS--The student will be able to:

- 11.01 Use engineers tape.
- 11.02 Use chaining pins.
- 11.03 Use plumb bobs.
- 11.04 Use tension pulls scale.
- 11.05 Use Lock hand level.
- 11.06 Use thermometers.
- 11.07 Use EDM equipment.
- 11.08 Use engineers level.
- 11.09 Use modern level.
- 11.10 Use precise level.
- 11.11 Use engineers transit, repeating and directional.
- 11.12 Use theodolite, repeating and directional.
- 11.13 Use field book to keep field notes.
- 11.14 Use plane table.
- 11.15 Use HP 41CX computer or equivalent.

12.0 RECOGNIZE THE USE OF THE VARIOUS MATERIALS OF SELECTED INDUSTRIES--The student will be able to:

- 12.01 Identify clay pipe and give use.
- 12.02 Identify PVC pipe and give use.
- 12.03 Identify cast iron pipe and give use.
- 12.04 Identify steel structural members and give use.
- 12.05 Identify reinforcing steel and give use.

- 12.06 Identify concrete structures.
 - 12.07 Identify asphalt types and uses.
 - 12.08 Identify corrosion preventing coatings.
 - 12.09 Identify concrete (RCP) pipe and give use.
 - 12.10 Identify pre stressed concrete cylinder pipe and give use.
- 13.0 PRODUCE DRAWINGS INVOLVING STANDARD EQUIPMENT AND COMPUTERS--The student will be able to:
- 13.01 Draw a plat.
 - 13.02 Draw an inlet structure.
 - 13.03 Draw a record subdivision.
 - 13.04 Draw a stress-strain diagram.
 - 13.05 Draw a pump/lift station.
- 14.0 SOLVE ENGINEERING GRAPHICS PROBLEMS USING STANDARD TECHNIQUES AND REFERENCE MATERIALS--The student will be able to:
- 14.01 Use Location Survey Manual and other Florida DOT manuals.
 - 14.02 Use typical design standards.
 - 14.03 Use Public Works Manuals.
 - 14.04 Use TR-55 Urban hydrology for small watersheds.
 - 14.05 Use manual of standard practice for detailing reinforced concrete structure (ACI 315-74) and others.
 - 14.06 Use county soil survey by soil conservation service - USDA.
 - 14.07 Prepare a topographic map of a subdivision with standard soil types.
 - 14.08 Using TR-55 and the prepared soils type map, compute peak run off.
 - 14.09 Use Route Location and Design, (Thomas F. Hickerson - McGraw - Hill).
 - 14.10 Use clay pipe engineering manual (NCPI quality - Research, Washington, D.C. 1982).
 - 14.11 Use Highway Engineering, (John Wiley & Sons) Clarkson H. Oglesby - latest edition.
- 15.0 ANALYZE PHYSICAL AND MECHANICAL PROPERTIES OF SOIL AND CONCRETE--The student will be able to:
- 15.01 Run standard ASTM soil test and compute results for the following:
 - a gradation analysis.
 - b liquid limit.
 - c plastic limit.
 - d modified proctor.
 - e moisture content-oven and/or speedy.
 - f nuclear density.
 - 15.02 Make a trial batch and run a standard ASTM concrete test and compute results for the following:
 - a slump.
 - b air entrainment.
 - c compressive strength.

- 16.0 SOLVE BASIC HYDRAULIC PROBLEMS USING THE THEORY OF INCOMPRESSIBLE FLUIDS--The student will be able to:
- 16.01 Compute peak discharge using "Use interim run off procedure for Florida - soil conservation service".
 - 16.02 Compute discharge due to developed condition of project.
 - 16.03 Compute quantity of water and waste water flow and size pressure pipes.
 - 16.04 Size pipes for gravity flow of storm waters.
- 17.0 SOLVE PROBLEMS USING THEORIES LEARNED IN ENGINEERING MECHANICS--The student will be able to:
- 17.01 Solve vector addition problems by the triangular method and the component method.
 - 17.02 Given two coordinates, calculate length of line and reference angle.
 - 17.03 Convert from polar to rectangular coordinates and its inverse.
 - 17.04 Compute resultant of concurrent force systems.
 - 17.05 Compute moments about a given point.
 - 17.06 Compute the resultant force from several given couples.
 - 17.07 Compute resultant of plane parallel force systems.
 - 17.08 Compute resultant of nonparallel nonconcurrent force systems.
 - 17.09 Replace a force by a force and a couple.
 - 17.10 Construct free body diagrams.
 - 17.11 Solve concurrent coplanar force systems (2 equations and 2 unknowns).
 - 17.12 Solve coplanar nonparallel force systems.
 - 17.13 Analyze frame and truss problems.
- 18.0 ESTABLISH GRADES, LOCATE PROPERTY LINES, AND UTILITIES; AND PRODUCE PLOTS AND CALCULATE CUT AND FILL BY AVERAGE-END-AREA--The student will be able to:
- 18.01 Calculate horizontal alignment for civil engineering structures.
 - 18.02 Calculate vertical alignment for civil engineering structures.
 - 18.03 Plot and draft maps, plats, plans and profiles, charts and graphs.
 - 18.04 Calculate cuts and fills using average-end-area method.
 - 18.05 Calculate borrow pit quantities.
- 19.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 19.01 Conduct a job search.
 - 19.02 Secure information about a job.
 - 19.03 Identify documents that may be required when applying for a job.
 - 19.04 Complete a job application.
 - 19.05 Demonstrate competence in job interview techniques.
 - 19.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 19.07 Identify acceptable work habits.
 - 19.08 Demonstrate knowledge of how to make job changes appropriately.

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19.09 Demonstrate acceptable employee health habits.

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Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Correctional Auxiliary Officer
Occupational Area: Public Service Occupations

PSAV

Program Numbers P430112
CIP Number 0743.010201
Grade Level 30, 31
Length 97 hours minimum
Certification CORR OFF @7 G
LAW ENF @7 G
PUB SERV @7 G

- I. **MAJOR CONCEPTS/CONTENT:** This program is designed to prepare students for employment as correctional auxiliary officers (industry title) or to provide supplemental training for persons previously or currently employed in this occupation. Employment as a correctional auxiliary officer requires certification in accordance with Chapter 943, Florida Statutes.

The content includes, but is not limited to, introduction to the criminal justice system, basic law for corrections, operational procedures, firearms, mechanics of search, controlling techniques, institutional disturbances, emergency medical techniques, communications skills, and human skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Through hands-on and field activities, the student will gain experience in search techniques, defensive tactics, use of firearm, and emergency medical procedures and CPR.

On the firing range, the Criminal Justice Standards and Training Commission Policy Manual states that the teacher/student ratio must be no more than 1:6.

- III. **SPECIAL NOTE:** Minimum length of this program is 97 hours as established by the Criminal Justice Standards and Training Commission (CJSTC) in accordance with Florida Administration Code 11E-29 and s. 943.12, F.S. Due to this short period of program length, students are not expected to perform actual duties upon completion of the program but are expected to know the content covered in this program. Trainees should be trained to perform actual job skills on the job.

In accordance with Rule 6A-10.040 F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The program may be offered in courses as long as 100% of minimum competencies are taught. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

This program must be taught in a CJSTC certified training center in order for the successfully completing student to be eligible for certification.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

All instructors must be certified by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission and the Department of Education (DOE), except Community Colleges where DOE certification is not required.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Describe the criminal justice system and the Florida Criminal Justice Standards and Training Commission.
- 02.0 Demonstrate weapons knowledge and skills.
- 03.0 Describe basic law and legal procedures.
- 04.0 Describe corrections rules, legal rights and responsibilities.
- 05.0 Describe and demonstrate corrections operations.
- 06.0 Demonstrate interpersonal skills.
- 07.0 Identify physical security considerations.
- 08.0 Demonstrate emergency medical procedures.
- 09.0 Demonstrate knowledge of sexually transmitted diseases, including AIDS.
- 10.0 Demonstrate employability skills.
- 11.0 Demonstrate awareness of ethnically diverse populations.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Correctional Auxiliary Officer
Secondary Number:
Postsecondary Number: P430112

01.0 DESCRIBE THE CRIMINAL JUSTICE SYSTEM AND THE FLORIDA CRIMINAL JUSTICE STANDARDS AND TRAINING COMMISSION--The student will be able to:

- 01.01 Define and identify the major components and general organization of the criminal justice system.
- 01.02 Describe the history of corrections.
- 01.03 Describe the principles of corrections.
- 01.04 Identify the objectives, responsibilities, duties and structures of the Criminal Justice Standards and Training Commission.

02.0 DEMONSTRATE WEAPONS KNOWLEDGE AND SKILLS--The student will be able to:

- 02.01 Use service weapon.
- 02.02 Demonstrate firearms safety procedures.
- 02.03 Use chemical agents.
- 02.04 Use alternate service weapons.
- 02.05 Use ammunition.

03.0 DESCRIBE BASIC LAW AND LEGAL PROCEDURES--The student will be able to:

- 03.01 Describe constitutional law.
- 03.02 Explain legal aspects of use of firearms.
- 03.03 Describe civil and criminal liability.

04.0 DESCRIBE CORRECTIONS RULES, LEGAL RIGHTS AND RESPONSIBILITIES--The student will be able to:

- 04.01 Describe State corrections rules and regulations.
- 04.02 Describe inmate rights and responsibilities and identify privileged communication.
- 04.03 Describe correctional officer rights and responsibilities.

05.0 DESCRIBE AND DEMONSTRATE CORRECTIONS OPERATIONS--The student will be able to:

- 05.01 Describe chain of command and organization.
- 05.02 Describe inspection services.
- 05.03 Write reports.
- 05.04 Complete inmate record forms.
- 05.05 Describe food service requirements/procedures.
- 05.06 Describe safety requirements/procedures.
- 05.07 Describe environmental health requirements/procedures.
- 05.08 Describe intake procedures.
- 05.09 Describe inmate property control procedures.
- 05.10 Describe classification procedures.

- 05.11 Roll fingerprints.
- 05.12 Describe inmate transfer procedures.
- 05.13 Describe inmate release procedures.
- 05.14 Describe bonding procedures.
- 05.15 Describe referral procedures.

06.0 DEMONSTRATE INTERPERSONAL SKILLS--The student will be able to:

- 06.01 Describe stress resolution and management.
- 06.02 Describe human behavior and needs.
- 06.03 Describe human adjustment to imprisonment.
- 06.04 Describe similarities and differences among different ethnic and cultural groups.
- 06.05 Describe inmate societies.
- 06.06 Demonstrate interpersonal skills including listening, nonverbal communication, and counseling techniques.
- 06.07 Identify criminal types and careers.
- 06.08 Describe institutional criminality.
- 06.09 Demonstrate crisis intervention.
- 06.10 Identify special characteristics of female inmates.
- 06.11 Identify special characteristics of mentally ill and mentally handicapped inmates.
- 06.12 Identify special characteristics of homosexual inmates.
- 06.13 Identify special characteristics of alcohol and drug abusers.
- 06.14 Identify special characteristics of physically handicapped inmates.
- 06.15 Describe skills to use when supervising inmates.
- 06.16 Recognize inmate deception and manipulation.
- 06.17 Describe suicide prevention and intervention techniques.

07.0 IDENTIFY PHYSICAL SECURITY CONSIDERATIONS--The student will be able to:

- 07.01 Describe inspection services.
- 07.02 Demonstrate inspection techniques.
- 07.03 Demonstrate control of physical security systems.
- 07.04 Describe tool and sensitive item control concepts/procedures, key control concepts/procedures, accountability concepts/procedures and security equipment concepts/procedures.
- 07.05 Describe inmate movement requirements/procedures.

08.0 DEMONSTRATE EMERGENCY MEDICAL PROCEDURES--The student will be able to:

- 08.01 Describe and demonstrate first responder techniques.
- 08.02 Demonstrate Cardiopulmonary Resuscitation (CPR) techniques.

09.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--
The student will be able to:

- 09.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens.
- 09.02 Identify community resources and services available to individuals with diseases caused by blood borne pathogens.

- 09.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of diseases by blood borne pathogens.
- 09.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
- 09.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 10.01 Conduct a job search.
- 10.02 Secure information about a job.
- 10.03 Identify documents that may be required when applying for employment.
- 10.04 Complete a job application.
- 10.05 Demonstrate competence in job interview techniques.
- 10.06 Identify or demonstrate appropriate responses to criticism by employer, supervisor, or other persons.
- 10.07 Identify acceptable work habits.
- 10.08 Demonstrate knowledge of how to make job changes appropriate.
- 10.09 Demonstrate acceptable employee health habits.

11.0 DEMONSTRATE AWARENESS OF ETHNICALLY DIVERSE POPULATIONS--The student will be able to:

- 11.01 Define ethnicity, race, culture and explain how culture influences us on a day to day basis.
- 11.02 Recognize statements which cause resentment in others of diverse cultures.
- 11.03 Identify at least three factors that contribute to cross-cultural conflict.
- 11.04 Identify cultural attributes and demonstrate an awareness of their impact on communication.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Correctional Officer
Occupational Area: Public Service Occupations

PSAV

Program Numbers P430102
CIP Number 0743.010200
Grade Level 30, 31
Length 411 hours minimum
Certification CORR OFF @7 G
PUB SERV @7 G
LAW ENF @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as correctional officers (372.667-018), or jailers (70100607) or to provide supplemental training for persons previously or currently employed in this occupation. The program prepares students for certification as a correctional officer in accordance with Chapter 943, Florida Statutes.

The content includes, but is not limited to, the criminal justice system and the Florida Criminal Justice Standards and Training Commission (CJSTC), weapons skills, basic law and legal procedures, corrections rules, rights and responsibilities, first responder techniques, inmate control techniques, communication knowledge, interpersonal skills, investigation procedures, correctional operations, physical security considerations, and emergency preparedness techniques.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Practical skills and field experiences are an integral part of this program to include courtroom demeanor and testifying, report writing, interviewing and interrogation techniques, communications, controlling and restraining techniques, weapons training, chemical agent applications, fingerprinting, substance abuse recognition, emergency preparedness techniques, first responder techniques, fire-fighting techniques, and interpersonal skills.

On the firing range, the Criminal Justice Standards and Training Commission Policy Manual states that the teacher/student ratio must be no more than 1:6.

- III. **SPECIAL NOTE:** This basic recruit course is established for the purpose of providing job related training at the entry level to candidates for full- or part-time correctional officer positions. The minimum length of this program is 411 hours as set by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission in accordance with Sections 943.12 and 943.13, F.S. All instructors must be certified by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission and the Department of Education, except Community Colleges where DOE certification is not required.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040 F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The program may be offered in courses as long as 100% of minimum competencies are taught. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

This program must be offered by CJSTC certified training center in order for the successfully completing student to be eligible for certification.

This program/course should be reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Describe the criminal justice system and the Florida Criminal Justice Standards and Training Commission.
- 02.0 Demonstrate weapons knowledge and skills.
- 03.0 Describe basic law and legal procedures.
- 04.0 Describe corrections rules, rights, and responsibilities.
- 05.0 Demonstrate first responder techniques.
- 06.0 Demonstrate inmate control techniques.
- 07.0 Demonstrate communications skills.
- 08.0 Demonstrate interpersonal skills.
- 09.0 Identify investigation knowledge and skills.
- 10.0 Describe and demonstrate correctional operations.
- 11.0 Identify physical security considerations.
- 12.0 Demonstrate emergency preparedness techniques.
- 13.0 Demonstrate employability skills.
- 14.0 Demonstrate knowledge of sexually transmitted diseases, including AIDS.
- 15.0 Demonstrate awareness of ethnically diverse populations.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Correctional Officer
Secondary Number:
Postsecondary Number: P430102

01.0 DESCRIBE THE CRIMINAL JUSTICE SYSTEM AND THE FLORIDA CRIMINAL JUSTICE STANDARDS AND TRAINING COMMISSION--The student will be able to:

- 01.01 Define and identify the major components and general organization of the criminal justice system.
- 01.02 Describe the history of corrections.
- 01.03 Describe the principles of corrections.
- 01.04 Describe probation and parole.
- 01.05 Identify the objectives, responsibilities, duties and structures of the Criminal Justice Standards and Training Commission.

02.0 DEMONSTRATE WEAPONS KNOWLEDGE AND SKILLS--The student will be able to:

- 02.01 Demonstrate firearms safety procedures.
- 02.02 Use ammunition.
- 02.03 Use a service weapon.
- 02.04 Use alternate service weapons.
- 02.05 Use chemical agents.

03.0 DESCRIBE BASIC LAW AND LEGAL PROCEDURES--The student will be able to:

- 03.01 Describe history and evolution of laws.
- 03.02 Describe constitutional law.
- 03.03 Identify elements of crime and parties to a crime and describe classification of offenses and intent.
- 03.04 Describe probable cause and arrest laws.
- 03.05 Explain legal aspects of search and seizure.
- 03.06 Describe subpoenas and court rules and trial procedures.
- 03.07 Demonstrate courtroom demeanor and testimony.
- 03.08 Describe legal defense and burden of proof.
- 03.09 Explain evidence concepts and evidence rules.
- 03.10 Identify various criminal laws.
- 03.11 Describe civil and criminal liability.
- 03.12 Explain the Myers Act and the Baker Act.

04.0 DESCRIBE CORRECTIONS RULES, RIGHTS, AND RESPONSIBILITIES--The student will be able to:

- 04.01 Describe State corrections rules and regulations.
- 04.02 Describe inmate rights and responsibilities and identify privileged communication.
- 04.03 Describe correctional officer rights and responsibilities.

05.0 DEMONSTRATE FIRST RESPONDER TECHNIQUES--The student will be able to:

- 05.01 Describe and demonstrate first responder techniques.
- 05.02 Demonstrate Cardiopulmonary Resuscitation (CPR) techniques.
- 05.03 Discuss health issues that first responders encounter most often.

06.0 DEMONSTRATE INMATE CONTROL TECHNIQUES--The student will be able to:

- 06.01 Describe effects and liabilities of use of nondeadly and deadly force.
- 06.02 Use restraint devices.
- 06.03 Demonstrate defensive tactics and physical conditioning.
- 06.04 Transport prisoners.
- 06.05 Search person, cell, and area.

07.0 DEMONSTRATE COMMUNICATION SKILLS--The student will be able to:

- 07.01 Take statements.
- 07.02 Take notes.
- 07.03 Write reports.
- 07.04 Describe reporting procedures.
- 07.05 Identify radio codes and demonstrate radio procedures.
- 07.06 Identify communication equipment and describe FCIC/NCIC.

08.0 DEMONSTRATE INTERPERSONAL SKILLS--The student will be able to:

- 08.01 Show ethical and professional behavior and courtesy.
- 08.02 Describe human behavior and needs.
- 08.03 Describe human adjustment to imprisonment.
- 08.04 Describe similarities and differences among different ethnic and cultural groups.
- 08.05 Describe inmate societies.
- 08.06 Identify criminal types and careers.
- 08.07 Describe institutional criminality.
- 08.08 Demonstrate interpersonal skills including listening, nonverbal communication, and counseling techniques.
- 08.09 Demonstrate crisis intervention techniques.
- 08.10 Identify special characteristics of juvenile and youthful inmates.
- 08.11 Identify special characteristics of female inmates.
- 08.12 Identify special characteristics of mentally ill and mentally handicapped inmates.
- 08.13 Identify special characteristics of homosexual inmates.
- 08.14 Identify special characteristics of alcohol and drug abusers.
- 08.15 Identify special characteristics of physically handicapped inmates.
- 08.16 Describe skills to use when supervising inmates.
- 08.17 Recognize inmate deception and manipulation.
- 08.18 Describe suicide prevention and intervention techniques.
- 08.19 Describe stress resolution and management.

09.0 IDENTIFY INVESTIGATION KNOWLEDGE AND SKILLS--The student will be able to:

- 09.01 Describe preliminary and follow-up investigation procedures.

- 09.02 Describe crime scene search procedures.
- 09.03 Describe evidence handling procedures.
- 09.04 Describe chain of custody.

10.0 DESCRIBE AND DEMONSTRATE CORRECTIONAL OPERATIONS--The student will be able to:

- 10.01 Describe chain of command and organization.
- 10.02 Describe inspection services.
- 10.03 Demonstrate inspection techniques.
- 10.04 Describe safety requirements/procedures.
- 10.05 Describe environmental health requirements/procedures.
- 10.06 Describe health care service requirements/procedures.
- 10.07 Describe food service requirements/procedures.
- 10.08 Describe control room operations/procedures.
- 10.09 Describe intake procedures.
- 10.10 Describe inmate property control procedures.
- 10.11 Describe classification procedures.
- 10.12 Roll fingerprints.
- 10.13 Describe inmate transfer procedures.
- 10.14 Describe inmate release procedures.
- 10.15 Describe bonding procedures.
- 10.16 Recognize potential weapons.
- 10.17 Recognize contraband and describe contraband control and disposal procedures.
- 10.18 Inventory property.
- 10.19 Describe disciplinary and confinement procedures.
- 10.20 Describe referral procedures.

11.0 IDENTIFY PHYSICAL SECURITY CONSIDERATIONS--The student will be able to:

- 11.01 Identify visual perception/discrimination and observation techniques.
- 11.02 Identify patrol concepts and techniques.
- 11.03 Identify patrol hazards.
- 11.04 Identify officer survival considerations.
- 11.05 Describe tool and sensitive item control concepts/procedures, key control concepts/procedures, accountability concepts/procedures and security equipment concepts/procedures.
- 11.06 Describe inmate movement requirements/procedures.

12.0 DEMONSTRATE EMERGENCY PREPAREDNESS TECHNIQUES--The student will be able to:

- 12.01 Demonstrate riot control procedures, techniques for handling unusual occurrences, hostage situation procedures, and emergency procedures.
- 12.02 Demonstrate firefighting principles/procedures.

13.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 13.01 Conduct a job search.
- 13.02 Secure information about a job.

- 13.03 Identify documents that may be required when applying for a job.
 - 13.04 Complete a job application.
 - 13.05 Demonstrate competence in job interview techniques.
 - 13.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 13.07 Identify acceptable work habits.
 - 13.08 Demonstrate knowledge of how to make job changes appropriately.
 - 13.09 Demonstrate acceptable employee health habits.
- 14.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--
The student will be able to:
- 14.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases, including HIV infection.
 - 14.02 Identify community resources and services available to the victims of sexually transmitted diseases.
 - 14.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
 - 14.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
 - 14.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.
- 15.0 DEMONSTRATE AWARENESS OF ETHNICALLY DIVERSE POPULATIONS--The student will be able to:
- 15.01 Define ethnicity, race, culture and explain how culture influences us on a day to day basis.
 - 15.02 Recognize statements which cause resentment in others of diverse cultures.
 - 15.03 Identify at least three factors that contribute to cross-cultural conflict.
 - 15.04 Identify cultural attributes and demonstrate an awareness of their impact on communication.

**Florida Department of Education
CURRICULUM FRAMEWORK**

Program Title: Correctional Probation Officer
Occupational Area: Public Service Occupations

PSAV

Program Numbers P430122
CIP Number 0743.010202
Grade Level 30, 31
Length 369 hours
Certification CORR OFF @7 G
LAW ENF @7 G
PUB SERV @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students as entry level correctional probation officers with the Florida Department of Corrections, which requires certification in accordance with Chapter 943, Florida Statutes.

The content includes, but is not limited to, introduction to the criminal justice system; laws, rules and regulations; public relations; operational procedures; human skills; and proficiency skills including first aid, self defense, firearms familiarization, driver perception, and controlling and restraining techniques.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Practical skills and field exercises are an integral part of this program, to include problem solving techniques, drug recognition, interpersonal skills, public speaking, supervisory skills, firearms familiarization, chemical agent application, self-defense training, controlling and restraining techniques, first aid, cardiopulmonary resuscitation, communications, report writing, courtroom demeanor and testimony.

On the firing range, the Criminal Justice Standards and Training Commission Policy Manual states that the teacher/student ratio must be no more than 1:6. Policy manual also indicates a 1:8 Teacher/Student ratio is required for self defense instruction.

- III. **SPECIAL NOTE:** The program is established for the purpose of providing job-related training at the entry level to candidates for full-time correctional probation officer positions with the Florida Department of Corrections. The minimum length of this program is 369 hours as set by

the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission (CJSTC) in accordance with Sections 943.12 and 943.13, Florida Statutes.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The program may be offered in courses as long as 100% of minimum competencies are taught. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

This program must be offered by a CJSTC certified training center in order for the successfully completing student to be eligible for certification.

All instructors must be certified by Florida Department of Law Enforcement and Department of Education, except Community Colleges where Department of Education certification is not required.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Describe the criminal justice system.
- 02.0 Explain the law and rules of probationer supervision, laws of arrest, and search and seizure limits.
- 03.0 Describe and demonstrate probation officer operational procedures.
- 04.0 Describe and demonstrate human relations skills.
- 05.0 Demonstrate basic first aid techniques.
- 06.0 Demonstrate cardiopulmonary resuscitation techniques.
- 07.0 Demonstrate self-defense techniques.
- 08.0 Demonstrate weapons familiarization.
- 09.0 Demonstrate controlling and restraining techniques.
- 10.0 Demonstrate knowledge of sexually transmitted diseases, including AIDS.
- 11.0 Demonstrate awareness of ethnically diverse populations.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Correctional Probation Officer
Secondary Number:
Postsecondary Number: P430122

01.0 DESCRIBE THE CRIMINAL JUSTICE SYSTEM--The student will be able to:

- 01.01 Compare and contrast various criminal justice systems.
- 01.02 Describe the history of the Florida correctional system.
- 01.03 Describe correctional trends and innovations.
- 01.04 Describe the Florida Probation and Parole Commission.
- 01.05 Describe various community facilities established for the supervision of probationers.
- 01.06 Describe offender classification and rehabilitation programs.

02.0 EXPLAIN THE LAWS AND RULES OF PROBATIONER SUPERVISION, LAWS OF ARREST, AND SEARCH AND SEIZURE LIMITS--The student will be able to:

- 02.01 Explain the legal aspects of supervision.
- 02.02 Demonstrate courtroom demeanor and testimony.
- 02.03 Explain laws of arrest.
- 02.04 Demonstrate proper arrest procedures and techniques.
- 02.05 Describe presentence and postsentence investigations.
- 02.06 Review and critique reports on violation of probation.
- 02.07 Describe sentencing guidelines.
- 02.08 Explain offender grievance procedures.
- 02.09 Explain personnel procedures pertinent to probation officers.
- 02.10 Describe professional behavior by probation officers.
- 02.11 Review and critique various investigations, other than presentence investigations.
- 02.12 Explain economic considerations in assessing offenders' ability to pay court ordered obligations.
- 02.13 Perform a legal mock search.
- 02.14 Demonstrate courtroom demeanor and testimony.

03.0 DESCRIBE AND DEMONSTRATE PROBATION OFFICER OPERATIONAL PROCEDURES--The student will be able to:

- 03.01 Write reports.
- 03.02 Use departmental report forms.
- 03.03 Prepare a progress report.
- 03.04 Describe Interstate Compact procedures.
- 03.05 Describe fiscal procedures relative to probationer supervision.
- 03.06 Describe procedures for termination of probation.
- 03.07 Prepare a plan of action for an emergency situation common to the probation and parole setting.
- 03.08 Describe methods to survive a hostage situation.
- 03.09 Operate an FCIC/NCIC computer terminal.
- 03.10 Apply problem solving techniques.
- 03.11 Develop treatment alternatives for probationers.
- 03.12 Identify case needs.

- 03.13 Demonstrate supervisory skills.
- 04.0 DESCRIBE AND DEMONSTRATE HUMAN RELATIONS SKILLS--The student will be able to:
- 04.01 Demonstrate interpersonal skills including listening and communications techniques.
 - 04.02 Critique interpersonal communications skills of self and others.
 - 04.03 Describe similarities and differences among different ethnic and cultural groups.
 - 04.04 Explain various motivational techniques.
 - 04.05 Differentiate normal behaviors from abnormal behaviors.
 - 04.06 Demonstrate direct and nondirect interviewing and counseling techniques.
 - 04.07 Identify commonly abused substances and user effects.
 - 04.08 Identify common psychological terms and common psychological testing measurements.
 - 04.09 Explain basic considerations of time management.
 - 04.10 Explain categories used for personnel assessments and considerations in career planning.
 - 04.11 Identify methods which offenders use to manipulate officers and compromise the professional relationship.
- 05.0 DEMONSTRATE BASIC FIRST AID TECHNIQUES--The student will be able to:
- 05.01 Administer first aid treatment for specific injuries.
 - 05.02 Identify shock and treatment.
 - 05.03 Recognize the signs of heart attack, fainting and epilepsy and diabetic reactions.
 - 05.04 Describe first aid of foreign objects in the eye, ear, air passages and food passages.
- 06.0 DEMONSTRATE CARDIOPULMONARY RESUSCITATION TECHNIQUES--The student will be able to:
- 06.01 Perform cardiopulmonary resuscitation.
 - 06.02 Demonstrate activation of the emergency medical system (EMS).
- 07.0 DEMONSTRATE SELF-DEFENSE TECHNIQUES--The student will be able to:
- 07.01 Explain appropriate use of force.
 - 07.02 Explain reporting procedures for incidents involving use of force.
 - 07.03 Demonstrate defenses against attack in different situations.
- 08.0 DEMONSTRATE WEAPONS FAMILIARIZATION--The student will be able to:
- 08.01 Explain firearms safety procedures.
 - 08.02 Explain basic handling procedures for handguns, shotguns, and chemical agents.
 - 08.03 Use a firearm.

09.0 DEMONSTRATE CONTROLLING AND RESTRAINING TECHNIQUES--The student will be able to:

- 09.01 Demonstrate physical conditioning and low-impact aerobics.
- 09.02 Use restraining system.
- 09.03 Demonstrate defensive applications of the flashlight.
- 09.04 Dispatch a radio report.

10.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--The student will be able to:

- 10.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases, including HIV infection.
- 10.02 Identify community resources and services available to the victims of sexually transmitted diseases.
- 10.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
- 10.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
- 10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 DEMONSTRATE AWARENESS OF ETHNICALLY DIVERSE POPULATIONS--The student will be able to:

- 11.01 Define ethnicity, race, culture and explain how culture influences us on a day to day basis.
- 11.02 Recognize statements which cause resentment in others of diverse cultures.
- 11.03 Identify at least three factors that contribute to cross-cultural conflict.
- 11.04 Identify cultural attributes and demonstrate an awareness of their impact on communication.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Criminal Justice Assisting
Occupational Area: Public Service Occupations

Secondary

PSAV

Program Numbers	8918000	P430199
CIP Number	0743.019900	0743.019900
Grade Level	9-12, 30, 31	30, 31
Length	3 credits	450 hours
Certification	LAW ENF @7 G	LAW ENF @7 G
	PUB SERV @7 G	PUB SERV @7 G
	CORR OFF @7 G	CORR OFF @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as criminal justice aides parking enforcement officers, police aides (243.362-014), and fingerprint clerks (209.367-026) that do not require certification by the Criminal Justice Standards and Training Commission, Florida Department of Law Enforcement.

The content includes, but is not limited to, introduction to the criminal justice system, police ethics and constitutional law, patrol procedures, traffic control procedures, defensive tactics and physical proficiency skills, first aid and cardiopulmonary resuscitation, interpersonal and communication skills, investigation procedures, court systems and trial procedures, correctional system, introduction to forensic science, crime prevention, property control, employability skills, and computer skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

Listed below are the courses that comprise this program when offered at the secondary level:

8918010 - Criminal Justice Assisting 1
8918020 - Criminal Justice Assisting 2
8918030 - Criminal Justice Assisting 3

- II. **LABORATORY ACTIVITIES:** Field and laboratory activities include basic procedures in traffic control, patrol, search and arrest, stop and frisk, mock trial, jail operations, crime prevention, fingerprinting, forensic photography, and crime laboratory examination procedures. To accomplish field and laboratory activities, the coordination of field trips to criminal justice agencies is essential.

- III. **SPECIAL NOTE:** Florida Public Service Association, is the appropriate vocational student organization for providing leadership training and reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks relevant to the student's career goal. The student must receive compensation for work performed.

The Parking Enforcement Specialist program is provided for in Section 316.640 F.S., and is approved by the Criminal Justice Standards and Training Commission.

If this program is offered for 450 hours or more, in accordance with Rule 6A 10.040, F.A.C., the minimum basic skills grade level required for this program is: Mathematics 6.0, Language 8.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 450 hours.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

This program/course should be reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, students will be able to:

- 01.0 Discuss goals of and career opportunities and requirements in the criminal justice system.
- 02.0 Interpret police ethics and constitutional laws in relation to law enforcement operations.
- 03.0 Describe court systems and trial processes.
- 04.0 Describe the correctional system and provide assistance in correctional/jail operation.
- 05.0 Utilize personal, interpersonal, and communication skills.
- 06.0 Demonstrate employability skills.

- 07.0 Describe characteristics of patrol and provide assistance in patrolling.
- 08.0 Describe traffic control procedures and provide assistance in traffic control.
- 09.0 Describe procedures and techniques for proper defensive tactics.
- 10.0 Apply first aid and CPR.
- 11.0 Describe crime and accident investigation procedures and provide assistance at scene.
- 12.0 Assist in forensic science tasks, such as fingerprinting, crime laboratory examination, and forensic photography.
- 13.0 Describe crime prevention programs and assist in developing and implementing them.
- 14.0 Explain property control procedures.
- 15.0 Demonstrate knowledge of sexually transmitted diseases, including AIDS and blood born pathogens.
- 16.0 Demonstrate knowledge of basic math skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Criminal Justice Assisting
Secondary Number: 8918000
Postsecondary Number: P430199

01.0 DISCUSS GOALS OF AND CAREER OPPORTUNITIES IN THE CRIMINAL JUSTICE SYSTEM--The student will be able to:

- 01.01 Define criminal justice system.
- 01.02 Discuss goals of the criminal justice system.
- 01.03 Describe career opportunities and the basic recruit requirements in the criminal justice system.

02.0 INTERPRET POLICE ETHICS AND CONSTITUTIONAL LAWS IN RELATION TO LAW ENFORCEMENT OPERATIONS--The student will be able to:

- 02.01 Interpret canons of police ethics.
- 02.02 Define constitutional law and describe how it affects law enforcement operations.
- 02.03 Describe federal law, state (Florida) criminal law, civil law, and local ordinances.

03.0 DESCRIBE COURT SYSTEMS AND TRIAL PROCESSES--The student will be able to:

- 03.01 Discuss the federal court system and identify different types of courts in federal court system.
- 03.02 Describe the Florida court system.
- 03.03 Describe local court systems in Florida.
- 03.04 Discuss Florida criminal law.
- 03.05 Discuss Florida criminal procedures.
- 03.06 Describe the people involved in the courtroom settings, and the processes of pretrial, trial, and posttrial.
- 03.07 Discuss the juvenile court system in Florida.
- 03.08 Assist in researching cases.
- 03.09 Describe and assist with warrants and summons process.
- 03.10 Notify witnesses and defendants of court schedules.
- 03.11 Demonstrate courtroom demeanor and testify in court.

04.0 DESCRIBE THE CORRECTIONAL SYSTEM AND PROVIDE ASSISTANCE IN CORRECTIONAL/JAIL OPERATION--The student will be able to:

- 04.01 Describe the history of corrections.
- 04.02 Discuss local, state (Florida), and federal correctional systems.
- 04.03 Describe how a jail officer can help the prisoner during certain periods of crisis.
- 04.04 Discuss probation and parole.
- 04.05 Discuss Florida juvenile corrections system.
- 04.06 Prepare booking forms.
- 04.07 Receive prisoner property.
- 04.08 Identify the rights of the prisoner.

- 04.09 Assist in conducting prisoner, body cavity, and cell searches.
- 04.10 Classify prisoners.
- 04.11 Maintain jail, prisoner, and property logs.

05.0 UTILIZE PERSONAL, INTERPERSONAL, AND COMMUNICATION SKILLS--The student will be able to:

- 05.01 Follow directions.
- 05.02 Display integrity, loyalty, dependability, and punctuality.
- 05.03 Show compassion and work well with others.
- 05.04 React to stress situations properly.
- 05.05 Use telephone courtesy and relay telephone messages.
- 05.06 Prepare written reports.
- 05.07 Demonstrate proper use of available communications equipment.
- 05.08 Describe techniques for obtaining information.
- 05.09 Identify sources of information.

06.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 06.01 Conduct a job search.
- 06.02 Secure information about a job.
- 06.03 Identify documents that may be required when applying for a job.
- 06.04 Complete a job application.
- 06.05 Demonstrate competence in job interview techniques.
- 06.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 06.07 Identify acceptable work habits.
- 06.08 Demonstrate knowledge of how to make job changes appropriately.
- 06.09 Demonstrate acceptable employee health habits.

07.0 DESCRIBE CHARACTERISTICS OF PATROL AND PROVIDE ASSISTANCE IN PATROLLING--The student will be able to:

- 07.01 State main duties and responsibilities of patrol officers.
- 07.02 Identify different patrol types and zones and the advantages and disadvantages of each patrol type.
- 07.03 Utilize observation points and sensory perceptions.
- 07.04 Utilize defensive driving techniques.
- 07.05 Demonstrate patrol techniques.
- 07.06 Identify suspicious persons and circumstances.
- 07.07 Assist in traffic stop.
- 07.08 Assist in inspecting vehicle and equipment.
- 07.09 Assist in stop and frisk.
- 07.10 Assist with arrest and search.
- 07.11 Describe how to establish rapport with citizens.

08.0 DESCRIBE TRAFFIC CONTROL PROCEDURES AND PROVIDE ASSISTANCE IN TRAFFIC CONTROL--The student will be able to:

- 08.01 Identify traffic emergencies and take proper action.
- 08.02 Position police vehicle and personnel.
- 08.03 Set up barricades and traffic cones.
- 08.04 Use hand signals, whistle, flashlight, and flares.

- 08.05 Coordinate with other traffic officers.
- 08.06 Provide escorts using proper protocol.
- 08.07 Use public address (bullhorn) system.
- 08.08 Serve as school crossing guard.
- 08.09 Read parking meters and identify violators.
- 08.10 Write parking citations.
- 08.11 Describe regulatory citation flow, their use and value.
- 08.12 Demonstrate knowledge of most frequently used sections of the uniform traffic code pertaining to parking regulations.

09.0 USE DEFENSIVE TACTICS AND PHYSICAL PROFICIENCY SKILLS--The student will be able to:

- 09.01 Recognize potential weapons.
- 09.02 Describe how to defend against knife or other sharp instrument.
- 09.03 Describe how to defend against firearm.
- 09.04 Apply counter moves.
- 09.05 Apply come-along holds.
- 09.06 Subdue and take down suspect.
- 09.07 Handcuff the suspect.
- 09.08 Conduct a wall search and a kneeling search.

10.0 APPLY FIRST AID AND CPR--The student will be able to:

- 10.01 Display personal hygiene.
- 10.02 Identify four classes of fire.
- 10.03 Use fire extinguishing agents.
- 10.04 Recognize hot power lines.
- 10.05 Recognize and respond to hazardous materials and situations.
- 10.06 Recognize life threatening situations.
- 10.07 Use gas mask and chemical agents.
- 10.08 Remove unconscious or disabled victim from dangerous situations.
- 10.09 Apply basic first aid techniques.
- 10.10 Recognize and report signs of abuse and neglect.
- 10.11 Apply cardiopulmonary resuscitation (CPR); secure and maintain certification in CPR.
- 10.12 Apply infection control measures in accordance with Center for Disease Control (CDC) guidelines.
- 10.13 Assist in handling mentally or physically disturbed person.

11.0 DESCRIBE CRIME AND ACCIDENT INVESTIGATION PROCEDURES AND PROVIDE ASSISTANCE AT SCENE--The student will be able to:

- 11.01 State the purpose and types of investigations.
- 11.02 Describe the responsibilities of law enforcement officers at the crime and/or accident scene.
- 11.03 Describe the role of evidence in investigations.
- 11.04 Describe crime scene investigation procedures.
- 11.05 Secure and preserve scene.
- 11.06 Photograph scene and evidence.
- 11.07 Take measurements.
- 11.08 Record facts using recording equipment and taking notes.

- 11.09 Sketch scene.
- 11.10 Assist in identifying, preserving, collecting, recording, and storing evidence.
- 11.11 Describe how to make casts of physical impressions of evidence.
- 11.12 Assist in processing scene for fingerprint.
- 11.13 Describe chain of custody.
- 11.14 Identify different search methods.

12.0 ASSIST IN FORENSIC SCIENCE TASKS, SUCH AS FINGERPRINTING, CRIME LABORATORY EXAMINATION, AND FORENSIC PHOTOGRAPHY--The student will be able to:

- 12.01 Roll fingerprints.
- 12.02 Identify focal points.
- 12.03 Identify fingerprint patterns.
- 12.04 Lift and record latent prints.
- 12.05 Describe blood-type identification procedures and assist with serological activities.
- 12.06 Describe hair and fiber examination procedures and assist with trace evidence activities.
- 12.07 Describe broken glass examination procedures and assist in broken glass examination.
- 12.08 Take mug shots and photographs.
- 12.09 Identify basic photo-laboratory procedures and assist with darkroom activities.

13.0 DESCRIBE CRIME PREVENTION PROGRAMS AND PROVIDE ASSISTANCE IN DEVELOPING AND IMPLEMENTING THEM--The student will be able to:

- 13.01 Identify community crime prevention programs.
- 13.02 Describe actions that citizens should take to implement a community or school crime prevention program.
- 13.03 Discuss how to develop and implement a crime prevention program.
- 13.04 Identify the role of law enforcement agencies in developing and implementing community crime prevention programs. Identify potential crime condition that can be eliminated by planning the physical environment.
- 13.05 Describe three stages at which architectural design can help prevent crime.
- 13.06 State ways in which an actively used neighborhood recreational facility helps prevent crime.
- 13.07 State features of exterior door design that will help prevent crime.
- 13.08 Conduct security surveys.
- 13.09 Assist with neighborhood crime watch activities.
- 13.10 Describe and assist in implementing community crime prevention programs such as Rape Crisis Center, Victim Advocate Program, Bike Safety Program, Traffic Safety Program, Child Safety Program, Financial Institution Security Program, Commercial and Business Security Program, and Sexual Assault Prevention Program.
- 13.11 Assist with manning Crime Alert Hotline.
- 13.12 Use crime analysis information.

13.13 Describe "Operation Identification" for residences and businesses.

14.0 EXPLAIN PROPERTY CONTROL PROCEDURES--The student will be able to:

- 14.01 Classify, identify, and mark property.
- 14.02 Match property with reports.
- 14.03 Assist with storage and control of evidence, property, and supplies.
- 14.04 Assist with issuance, maintenance, and inventory of department equipment and supplies, using appropriate computer application.

15.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS AND BLOOD BORN PATHOGENS--The student will be able to:

- 15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens.
- 15.02 Identify community resources and services available to individuals with diseases caused by blood borne pathogens.
- 15.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of diseases caused by blood borne pathogens.
- 15.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
- 15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 DEMONSTRATE KNOWLEDGE OF BASIC MATH SKILLS--The student will be able to:

- 16.01 Draw, read, and analyze and report on graphs, charts, and tables.
- 16.02 Measure time, temperature, distance, capacity and mass/weight.
- 16.03 Make and use measurements in both traditional and metric units.
- 16.04 Make estimates and approximations and judge the reasonableness of the result.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8918010
Course Title: Criminal Justice Assisting 1
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to introduce students to the fields of law enforcement, the court system, and the correctional system. The content includes career opportunities in these fields, court system, correctional system, interpersonal and communication skills, and employability skills.

01.0 DISCUSS GOALS OF AND CAREER OPPORTUNITIES IN THE CRIMINAL JUSTICE SYSTEM--The student will be able to:

- 01.01 Define criminal justice system.
- 01.02 Discuss goals of the criminal justice system.
- 01.03 Describe career opportunities in the criminal justice system.

02.0 INTERPRET POLICE ETHICS AND CONSTITUTIONAL LAWS IN RELATION TO LAW ENFORCEMENT OPERATIONS--The student will be able to:

- 02.01 Interpret canons of police ethics.
- 02.02 Define constitutional law and describe how it affects law enforcement operations.
- 02.03 Describe federal law, state (Florida) criminal law, civil law, and local ordinances.

03.0 DESCRIBE COURT SYSTEMS AND TRIAL PROCESSES--The student will be able to:

- 03.01 Discuss the federal court system and identify different types of courts in federal court system.
- 03.02 Describe the Florida court system.
- 03.03 Describe local court systems in Florida.
- 03.04 Discuss Florida criminal law.
- 03.05 Discuss Florida criminal procedures.
- 03.06 Describe the people involved in the courtroom settings, and the processes of pretrial, trial, and posttrial.
- 03.07 Discuss the juvenile court system in Florida.
- 03.08 Present an oral and written report on criminal cases utilizing computer data base and word processing software.
- 03.09 Describe and assist with warrants and summons process.
- 03.10 Notify witnesses and defendants of court schedules.
- 03.11 Demonstrate courtroom demeanor and testify in court.

04.0 DESCRIBE THE CORRECTIONAL SYSTEM AND PROVIDE ASSISTANCE IN CORRECTIONAL/JAIL OPERATION--The student will be able to:

- 04.01 Describe the history of corrections.

- 04.02 Discuss local, state (Florida), and federal correctional systems.
 - 04.03 Describe how a jail officer can help the prisoner during certain periods of crisis.
 - 04.04 Discuss probation and parole.
 - 04.05 Discuss Florida juvenile corrections system.
 - 04.06 Prepare booking forms.
 - 04.07 Receive prisoner property.
 - 04.08 Identify the rights of the prisoner.
 - 04.09 Assist in conducting prisoner, body cavity, and cell searches.
 - 04.10 Classify prisoners.
 - 04.11 Maintain jail, prisoner, and property logs.
- 05.0 UTILIZE PERSONAL, INTERPERSONAL, AND COMMUNICATION SKILLS--The student will be able to:
- 05.01 Use telephone courtesy and relay telephone messages.
 - 05.02 Demonstrate proper use of available communications equipment.
 - 05.03 Follow directions.
 - 05.04 Demonstrate appropriate reactions to stressful situations.
 - 05.05 Prepare written reports.
 - 05.06 Describe techniques for obtaining information.
 - 05.07 Identify sources of information.
 - 05.08 Use the computer as a tool in the special applications associated with the criminal justice system.
- 06.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 06.01 Conduct a job search.
 - 06.02 Secure information about a job.
 - 06.03 Identify documents that may be required when applying for a job.
 - 06.04 Complete a job application.
 - 06.05 Demonstrate competence in job interview techniques.
 - 06.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 06.07 Identify acceptable work habits.
 - 06.08 Demonstrate knowledge of how to make job changes appropriately.
 - 06.09 Demonstrate acceptable personal hygiene and professional appearance.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8918020
Course Title: Criminal Justice Assisting 2
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to develop competencies in patrol, traffic control, defensive tactics and physical proficiency skills, and first aid and cardiopulmonary resuscitation skills.

07.0 DESCRIBE CHARACTERISTICS OF PATROL AND PROVIDE ASSISTANCE IN PATROLLING-
-The student will be able to:

- 07.01 State main duties and responsibilities of patrol officers.
- 07.02 Identify different patrol types and zones and the advantages and disadvantages of each patrol type.
- 07.03 Utilize observation points and sensory perceptions.
- 07.04 Demonstrate appropriate defensive driving techniques.
- 07.05 Demonstrate patrol techniques.
- 07.06 Identify suspicious persons and circumstances.
- 07.07 Assist in traffic stop.
- 07.08 Assist in inspecting vehicle and equipment.
- 07.09 Assist in stop and frisk.
- 07.10 Assist with arrest and search.
- 07.11 Describe how to establish rapport with citizens.

08.0 DESCRIBE TRAFFIC CONTROL PROCEDURES AND PROVIDE ASSISTANCE IN TRAFFIC CONTROL--The student will be able to:

- 08.01 Identify traffic emergencies and take proper action.
- 08.02 Position police vehicle and personnel.
- 08.03 Set up barricades and traffic cones.
- 08.04 Use hand signals, whistle, flashlight, and flares.
- 08.05 Coordinate with other traffic officers.
- 08.06 Provide escorts using proper protocol.
- 08.07 Use public address (bullhorn) system.
- 08.08 Read parking meters and identify violators.
- 08.09 Write Florida uniform traffic citations.
- 08.10 Describe regulatory citation flow, their use and value.
- 08.11 Identify the most frequently used sections of the uniform traffic code.

09.0 DEMONSTRATE USE OF FORCE CONTINUUM AND/OR MATRIX--The student will be able to:

- 09.01 Recognize potential weapons.
- 09.02 Describe how to defend against knife or other sharp instrument.
- 09.03 Describe how to defend against firearm.

- 09.04 Describe proper procedure and techniques for applying counter moves.
 - 09.05 Describe proper procedure and techniques for applying come-along holds.
 - 09.06 Describe proper procedure and techniques for subdueing and take down suspect.
 - 09.07 Describe proper procedure and techniques for handcuffing the suspect.
 - 09.08 Describe proper procedure and techniques for conducting a wall search and a kneeling search.
- 10.0 APPLY FIRST AID AND CPR--The student will be able to:
- 10.01 Display personal hygiene.
 - 10.02 Identify four classes of fire.
 - 10.03 Use fire extinguishing agents.
 - 10.04 Recognize hot power lines.
 - 10.05 Recognize and respond to hazardous materials and situations.
 - 10.06 Recognize life threatening situations.
 - 10.07 Use gas mask and chemical agents.
 - 10.08 Remove unconscious or disabled victim from dangerous situations.
 - 10.09 Apply basic first aid techniques.
 - 10.10 Recognize and report signs of abuse and neglect.
 - 10.11 Apply cardiopulmonary resuscitation (CPR); secure and maintain certification in CPR.
 - 10.12 Apply infection control measures in accordance with Center for Disease Control (CDC) guidelines.
 - 10.13 Describe appropriate procedures for dealing with mentally or physically disturbed persons.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8918030
Course Title: Criminal Justice Assisting 3
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to develop competencies in crime and accident investigation procedures, forensic science tasks, crime prevention, and property control procedures.

11.0 DESCRIBE CRIME AND ACCIDENT INVESTIGATION PROCEDURES AND PROVIDE ASSISTANCE AT SCENE--The student will be able to:

- 11.01 State the purpose and types of investigations.
- 11.02 Describe the responsibilities of law enforcement officers at the crime and/or accident scene.
- 11.03 Describe the role of evidence in investigations.
- 11.04 Describe crime scene investigation procedures.
- 11.05 Secure and preserve scene.
- 11.06 Photograph scene and evidence.
- 11.07 Take measurements.
- 11.08 Record facts using recording equipment and taking notes.
- 11.09 Sketch scene.
- 11.10 Assist in identifying, preserving, collecting, recording, and storing evidence.
- 11.11 Describe how to make casts of physical impressions of evidence.
- 11.12 Assist in processing scene for fingerprint.
- 11.13 Describe chain of custody.
- 11.14 Identify different search methods.

12.0 ASSIST IN FORENSIC SCIENCE TASKS, SUCH AS FINGERPRINTING, CRIME LABORATORY EXAMINATION, AND FORENSIC PHOTOGRAPHY--The student will be able to:

- 12.01 Roll fingerprints.
- 12.02 Identify focal points.
- 12.03 Identify fingerprint patterns.
- 12.04 Lift and record latent prints.
- 12.05 Describe blood-type identification procedures and assist with serological activities.
- 12.06 Describe hair and fiber examination procedures and assist with trace evidence activities.
- 12.07 Describe broken glass examination procedures and assist in broken glass examination.
- 12.08 Take mug shots and photographs.
- 12.09 Identify basic photo-laboratory procedures and assist with darkroom activities.

13.0 DESCRIBE CRIME PREVENTION PROGRAMS AND PROVIDE ASSISTANCE IN DEVELOPING AND IMPLEMENTING THEM--The student will be able to:

- 13.01 Identify community crime prevention programs.
- 13.02 Describe actions that citizens should take to implement a community or school crime prevention program.
- 13.03 Discuss how to develop and implement a crime prevention program.
- 13.04 Identify the role of law enforcement agencies in developing and implementing community crime prevention programs. Identify potential crime condition that can be eliminated by planning the physical environment.
- 13.05 Describe three stages at which architectural design can help prevent crime.
- 13.06 State ways in which an actively used neighborhood recreational facility helps prevent crime.
- 13.07 State features of exterior door design that will help prevent crime.
- 13.08 Conduct security surveys.
- 13.09 Assist with neighborhood crime watch activities.
- 13.10 Describe and assist in implementing community crime prevention programs such as Rape Crisis Center, Victim Advocate Program, Bike Safety Program, Traffic Safety Program, Child Safety Program, Financial Institution Security Program, Commercial and Business Security Program, and Sexual Assault Prevention Program.
- 13.11 Assist with manning Crime Alert Hotline.
- 13.12 Use crime analysis information.
- 13.13 Describe "Operation Identification" for residences and businesses.

14.0 EXPLAIN PROPERTY CONTROL PROCEDURES--The student will be able to:

- 14.01 Classify, identify, and mark property.
- 14.02 Match property with reports.
- 14.03 Describe the storage and control of evidence, property, and supplies.
- 14.04 Operate I'dent equipment.
- 14.05 Assist with issuance, maintenance, and inventory of department equipment and supplies.

15.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--The student will be able to:

- 15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens.
- 15.02 Identify community resources and services available to individuals with diseases caused by blood borne pathogens.
- 15.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of diseases caused by blood borne pathogens.
- 15.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care

of all patients following Centers for Disease Control (CDC) guidelines.

15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 DEMONSTRATE KNOWLEDGE OF BASIC MATH SKILLS--The student will be able to:

16.01 Draw, read, and analyze and report on graphs, charts, and tables.

16.02 Measure time, temperature, distance, capacity and mass/weight.

16.03 Make and use measurements in both traditional and metric units.

16.04 Makes estimates and approximations and judge the reasonableness of the result.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Criminal Justice Technology
Occupational Area: Public Service Occupations

PSV

CIP Number 0743.010300
Grade Level College Credits
Length AS Degree/64 Hours

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students to work in law enforcement as criminal justice manager/technicians (industry title) agencies, correctional institutions, juvenile courts, crime laboratories, or mobile units dealing with physical evidence, etc. or to provide supplemental training for persons previously or currently employed in these occupations.

This program does not prepare students for certification as corrections or law enforcement officers. A student must successfully complete the Criminal Justice Standards and Training Commission Basic Recruit Program in either law enforcement or corrections to become certified, pursuant to Chapter 943, Florida Statutes.

The content includes, but is not limited to, patrol and investigative activities; the handling and care of incarcerated individuals; procedures for initial and post contact with the public in such matters as obtaining and relating information; developing critical thinking and decision making processes; preparing reports, visitation programs and testifying in court; techniques for collection, preparation and transportation of physical evidence; methods of crime prevention; and methods for investigation, counseling and referral of neglected/dependent children, delinquents and youthful offenders.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** The collection, identification and presentation of evidence, criminal investigative techniques and first aid instruction are topics that should be treated and taught in a laboratory and field setting. The criminal justice technology students should also undergo clinical experience courses. Traffic control, photography, physical education, driving and crime scene are also field based operations.
- III. **SPECIAL NOTE:** Successful completion of the Criminal Justice Standards Commission basic recruit programs in either law enforcement

or corrections may garnish students college credit toward the associate degree. The credits to be awarded are left to the discretion of the institution involved.

Professional Association student membership is encouraged in the Academy of Criminal Justice Sciences or the American Criminal Justice Association or Lambda Alpha Epsilon (LAE).

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Describe and discuss the criminal justice system.
- 02.0 Describe and discuss the principles of criminology.
- 03.0 Identify the criminal investigation procedure.
- 04.0 Describe the juvenile delinquency field.
- 05.0 Summarize police administration.
- 06.0 Demonstrate law enforcement operations procedures.
- 07.0 Identify procedures in accident investigation and traffic enforcement.
- 08.0 Describe the field of corrections administration.
- 09.0 Identify deviant and abnormal behavior.
- 10.0 Describe the field of criminal law.
- 11.0 Identify court room demeanor and testimony procedures.
- 12.0 Explain evidence and rules of evidence.
- 13.0 Describe non-institutional treatment of the offender (community based treatment).
- 14.0 Demonstrate employability skills.
- 15.0 Describe institutional treatment of the offender.
- 16.0 Describe group and individual counseling.
- 17.0 Recognize and use human relations skills, tolerance and understanding of cultural differences and self discipline.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Criminal Justice Technology
Secondary Number:
Postsecondary Number: 0743.010300

01.0 DESCRIBE AND DISCUSS THE CRIMINAL JUSTICE SYSTEM--The student will be able to:

- 01.01 Define the primary components of criminal justice and their primary responsibilities.
- 01.02 Identify problems that keep the system from functioning effectively and efficiently.
- 01.03 Explain the function and procedure of the federal uniform crime reporting (UCR) system.
- 01.04 Contrast present day criminal justice traditions and practices with their historical precedents and beginnings.
- 01.05 List the procedures an offender undergoes in his/her progression through the system.
- 01.06 Define and evaluate the present day value of the Peelian principles.

02.0 DESCRIBE AND DISCUSS THE PRINCIPLES OF CRIMINOLOGY--The student will be able to:

- 02.01 Analyze the criminal justice system through the processes of detection, apprehension, prosecution, and corrections.
- 02.02 Summarize the major theoretical factors and forces assumed to cause crime.
- 02.03 Illustrate the impact of crime on persons and property.
- 02.04 Discuss the extent of crime in the United States.
- 02.05 Define the victimless crimes and the origin of that term.
- 02.06 Discuss the ramifications of violent crimes, the career criminal and organized crime.

03.0 IDENTIFY THE CRIMINAL INVESTIGATION PROCEDURE--The student will be able to:

- 03.01 Explain some of the investigative techniques used in solving crimes.
- 03.02 Explain general criminal laboratory techniques.
- 03.03 Explain the necessity for and the methods of marking and preserving evidence.
- 03.04 Discuss the necessity for and importance of crime scene protection.
- 03.05 Define the importance of evidence to the court proceedings following arrest.
- 03.06 Identify various types of investigative hardware/equipment.
- 03.07 Describe the eleven primary steps of preliminary investigation.
- 03.08 Demonstrate ability to draw a simple crime scene sketch.
- 03.09 Discuss principles of proper interrogation techniques.

- 03.10 Explain the importance of police records to the investigative process.
- 04.0 DESCRIBE THE JUVENILE DELIQUENCY FIELD--The student will be able to:
 - 04.01 Define juvenile delinquency.
 - 04.02 Explain the general proceedings of the juvenile court system.
 - 04.03 Compare the advantages and disadvantages of juvenile incarceration.
 - 04.04 Identify some of the major causes of juvenile delinquency.
 - 04.05 Analyze the problem areas which have an influence upon juvenile delinquency between peers, parents, and school.
 - 04.06 Explain labeling theory.
 - 04.07 Discuss the relevance and dynamics of gang theory to juvenile delinquency causation.
 - 04.08 Relate the importance of the public school system to detection and prevention.
 - 04.09 Discuss the juvenile halfway house concept.
- 05.0 SUMMARIZE POLICE ADMINISTRATION--The student will be able to:
 - 05.01 Appraise the impact of National patrol studies.
 - 05.02 Contrast the variations in organizational structures of police departments.
 - 05.03 Give examples of different departmental recruiting techniques.
 - 05.04 Explain the principles of and difference between line and staff.
 - 05.05 Define the general principles of allocation and deployment of patrol manpower.
 - 05.06 Explain the concept of criminal investigation management and supervision of cases.
 - 05.07 Discuss the importance of a strong program of organized crime and vice control.
 - 05.08 Identify crime prevention techniques.
 - 05.09 Point out the relevance of Special Operations to the administration of police services.
 - 05.10 Give examples of the advantages of computerized criminal justice information systems and their importance to the overall police agency operation.
- 06.0 DEMONSTRATE LAW ENFORCEMENT OPERATIONS PROCEDURES--The student will be able to:
 - 06.01 Prepare a hypothetical public service announcement for news media.
 - 06.02 Demonstrate a knowledge of mobile patrol techniques.
 - 06.03 Appraise the value of making presentations to citizen groups.
 - 06.04 Display effective oral communication techniques.
 - 06.05 Prepare written reports.
 - 06.06 Demonstrate the ability to prepare an effective written report.
 - 06.07 Compare the advantages and disadvantages between foot patrol and motor patrol.
 - 06.08 Explain why it is important to establish good rapport with citizens.

- 06.09 Discuss safety practices that should be used in stopping suspicious vehicles.
- 06.10 Explain the difference between the generalist and specialist concepts of patrol activity.

07.0 IDENTIFY PROCEDURES IN ACCIDENT INVESTIGATION AND TRAFFIC ENFORCEMENT--
The student will be able to:

- 07.01 Identify and discuss the 3 "E's" of traffic administration.
- 07.02 Identify basic steps in accident investigation.
- 07.03 Explain the concept of Selective Enforcement.
- 07.04 State the first duty of the accident investigator upon arrival at the scene.
- 07.05 Identify methods of locating accident witnesses.
- 07.06 Demonstrate ability to sketch a simple accident scene.
- 07.07 Define the concept and applicability of computers to traffic enforcement.
- 07.08 Contrast the pros and cons of use of motorcycles in accident investigations and enforcement programs.
- 07.09 Describe the traffic accident specialist and the use of specially equipped accident investigation vans.
- 07.10 Relate and show proficiency in the use of the skid mark formula.

08.0 DESCRIBE THE FIELD OF CORRECTIONS ADMINISTRATION--The student will be able to:

- 08.01 Explain the value of the history and evolution of corrections.
- 08.02 Discuss the philosophies of incarceration.
- 08.03 Discuss at least four major problems facing contemporary correctional administrators.
- 08.04 Identify the major differences between juvenile and adult institutionalization.
- 08.05 Contrast the early Auburn and Philadelphia style of prison construction with modern day practices.
- 08.06 Identify problems of the prison industry and vocational programs.
- 08.07 Explain the general concept of inmate gain time.

09.0 IDENTIFY DEVIANT AND ABNORMAL BEHAVIOR--The student will be able to:

- 09.01 Discuss the elements of professional behavior.
- 09.02 Discuss the importance of a professional attitude toward deviant and abnormal behavior.
- 09.03 Name the normal human defense mechanisms.
- 09.04 Identify mental disturbances that are confronted by criminal justice practitioners.
- 09.05 Contrast psychopathic behavior and the "normal" criminal.
- 09.06 Appraise the value of crisis intervention techniques in handling family violence situations.
- 09.07 Identify suicide behavior and forms of suicide.
- 09.08 Identify the importance of the criminal justice practitioner maintaining a healthy and honest self concept.

- 09.09 Discuss the relevance of knowledge of deviant and abnormal sexual behavior to the successful investigation and prosecution of sex crimes.
- 09.10 Recognize and discuss stress management in criminal justice work.
- 10.0 DESCRIBE THE FIELD OF CRIMINAL LAW--The student will be able to:
 - 10.01 Discuss the legal procedures for securing admissions and confessions.
 - 10.02 Identify dying declarations.
 - 10.03 Demonstrate a practical knowledge of the rules of evidence.
 - 10.04 Explain how burden of proof relates to a court trial.
 - 10.05 Name some examples that show the difference between civil and criminal court trials.
 - 10.06 Differentiate the difference between procedural and substantive criminal law.
 - 10.07 Explain the legacy of English common law and its relationship to modern jurisprudence.
 - 10.08 Identify the legal elements of the crime of rape.
 - 10.09 Discuss the implications of constitutional law and it's relationship to criminal law.
 - 10.10 Discuss the Bill of Rights of the Constitution.
 - 10.11 Explain the concept of Stare Decesis.
 - 10.12 Give an example of an ex post facto law.
- 11.0 IDENTIFY COURT ROOM DEMEANOR AND TESTIMONY PROCEDURES--The student will be able to:
 - 11.01 Explain the duties of a baliff in court.
 - 11.02 Describe the system of witness and defendant notification of court schedules.
 - 11.03 Appraise the value of proper grooming and appearance habits.
 - 11.04 List techniques helpful when being cross examined.
 - 11.05 Explain the proper procedure for use of a hand written notebook as reference.
- 12.0 EXPLAIN EVIDENCE AND RULES OF EVIDENCE--The student will be able to:
 - 12.01 State the purpose of evidence.
 - 12.02 Name and describe types of evidence.
 - 12.03 Define the term admissibility of evidence.
 - 12.04 Define the term sufficiency of evidence.
 - 12.05 Describe the general process and handling of all evidence from time of discovery until submitted to the court.
 - 12.06 Describe the nature, purpose, and legal framework of privileged information regarding evidence.
- 13.0 DESCRIBE NON-INSTITUTIONAL TREATMENT OF THE OFFENDER (COMMUNITY BASED TREATMENT)--The student will be able to:
 - 13.01 Define the concept of community based corrections.
 - 13.02 Contrast and define the concepts of probation and parole.
 - 13.03 Name the advantages of work release and prerelease programs.

- 13.04 Discuss the problems associated with probation case loads.
 - 13.05 Explain the concept of contracting for correctional services with private/public sector.
 - 13.06 Identify important historical progressions in the origins of parole.
 - 13.07 Identify the "Father of Probation" and his contribution to probational thought.
- 14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 14.01 Conduct a job search.
 - 14.02 Secure information about a job.
 - 14.03 Identify documents that may be required when applying for a job.
 - 14.04 Complete a job application.
 - 14.05 Demonstrate competence in job interview techniques.
 - 14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 14.07 Identify acceptable work habits.
 - 14.08 Demonstrate knowledge of how to make job changes appropriately.
 - 14.09 Demonstrate acceptable employee health habits.
- 15.0 DESCRIBE INSTITUTIONAL TREATMENT OF THE OFFENDER--The student will be able to:
- 15.01 Define the general categories of treatment services.
 - 15.02 Explain the various roles of psychologists, psychiatrists, and sociologists in correctional institutions.
 - 15.03 Explain the difference between vocational and therapeutic models for the rehabilitation of offenders.
 - 15.04 Explain how the classification process can frequently intensify conflict between treatment and custody staffs.
 - 15.05 List the classification areas or grades of inmates.
- 16.0 DESCRIBE GROUP AND INDIVIDUAL COUNSELING--The student will be able to:
- 16.01 Identify goals of correctional counseling.
 - 16.02 Describe the casework role and function.
 - 16.03 Discuss the principles of counseling techniques.
 - 16.04 Explain types of role playing counseling techniques.
 - 16.05 Identify some of the unique constraints and considerations in alcohol and drug abuse counseling.
 - 16.06 Identify types of community resources that can be called upon to assist you in counseling activities.
- 17.0 RECOGNIZE AND USE HUMAN RELATIONS SKILLS, TOLERANCE AND UNDERSTANDING OF CULTURAL DIFFERENCES AND SELF DISCIPLINE--The student will be able to:
- 17.01 List the purposes of a structured public/human relations program in a police department/corrections agency.
 - 17.02 Identify and describe police-community relations.
 - 17.03 Identify impediments that typically circumvent a successful minority recruitment program.

- 17.04 Contrast some of the major cultural and ethnic differences that exist in our pluralistic society.
- 17.05 Identify prejudice, discrimination and racism.
- 17.06 List modern structured public and human relation programs utilized by law enforcement agencies.
- 17.07 Discuss the psychological concepts of motivation and basic human needs.
- 17.08 Discuss police ethics.
- 17.09 Discuss the impact of internal and external controls on police conduct.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Emergency Administration and Management
Occupational Area: Public Service Education

PSV

CIP Number 0744.040102
Grade Level College Credits
Length AS Degree

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment in the field of emergency services with a discipline in Emergency Management. The student can serve as, but is not limited to positions of Emergency Managers, Emergency Management Planners, Emergency Operations Coordinator, Environment Compliance Planners, and Emergency Management Specialists. Emergency Management students can be employed by, but are not limited to, State, Local, Federal and International governments, business and industry, military installations, and health care facilities.

In order to be certified as an Emergency Manager through the National Coordinating Council on Emergency Management (NCCEM), work experience is required. This program gives an individual the knowledge, skills and abilities to effectively manage a comprehensive emergency management program.

The content includes, but is not limited to, working knowledge of all basic tenets in emergency management that are encompassed in the phases of mitigation, preparedness, response and recovery. Along with interactive experience, the student develops knowledge of community planning, coordination and management functions. The purpose is to design and improve emergency management capabilities and command and control operations of major and catastrophic disasters.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory program is provided through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities are an integral part of the program.

Students will participate in mock table top and Emergency Operations training exercises. In some cases students will participate in field functional mock disaster drills and perform tasks under conditions considered hazardous. There shall be no less than one instructor for each six students, but in no case shall there be less than two instructors on the scene. The instructors shall be placed to oversee the safety and effectiveness of the training.

III. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Demonstrate knowledge of emergency operations planning system.
- 02.0 Demonstrate knowledge of emergency management training and education program.
- 03.0 Demonstrate knowledge of emergency management operations.
- 04.0 Demonstrate knowledge of the administration role of the emergency manager.
- 05.0 Demonstrate knowledge of federal, state and local mitigation programs.
- 06.0 Demonstrate knowledge of long and short term recovery programs.
- 07.0 Demonstrate knowledge of the facilities and equipment used in comprehensive emergency management.
- 08.0 Demonstrate knowledge of professional development for advancement within the profession.

**Florida Department of Education
Student Performance Standards**

Program Title: Emergency Administration and Management
Postsecondary Number: 0744.040102

01.0 DEMONSTRATE KNOWLEDGE OF EMERGENCY OPERATIONS PLANNING SYSTEM - The student will be able to:

- 01.01 Demonstrate knowledge of emergency management organization and procedures.
- 01.02 Demonstrate knowledge of comprehensive emergency management systems.
- 01.03 Demonstrate knowledge of emergency planning concepts necessary to develop as integrated, generic, comprehensive emergency operations plans.
- 01.04 Recognize and identify different concepts of emergency planning.
- 01.05 Describe the processes for development of an emergency operation plan.
- 01.06 Analyze and apply appropriate criteria necessary for effective emergency operations plan development.
- 01.07 Develop and evaluate an emergency operations plan based on data provided on a hypothetical jurisdiction.
- 01.08 Demonstrate knowledge of the activities that should happen in each phase of a disaster.
- 01.09 Demonstrate knowledge of the responsibility of emergency management activities.
- 01.10 Develop the ability to determine hazards and develop risk assessment programs in local communities.
- 01.11 Demonstrate understanding of knowledge, skills and abilities necessary to understand emergency management as a field of research and practice.
- 01.12 Demonstrate understanding of the organizing principles and practices of effective emergency management at the local, state and federal levels.
- 01.13 Demonstrate an in-depth understanding of past and current civil defense and emergency management showing their evolution since World War II.

02.0 DEMONSTRATE KNOWLEDGE OF EMERGENCY MANAGEMENT TRAINING AND EDUCATION PROGRAMS: -- The student will be able to:

- 02.01 Deliver emergency management public education programs to target populations.
- 02.02 Acquire understanding of several teaching concepts and select an effective method.
- 02.03 Acquire understanding of the important points of job analysis.
- 02.04 Apply learned principles to design simple performance evaluation criteria.
- 02.05 Acquire understanding of how to communicate principles and ideas to the students.

03.0 DEMONSTRATE KNOWLEDGE OF EMERGENCY MANAGEMENT OPERATIONS -- The student will be able to:

- 03.01 Describe the processes for development of an emergency operations plan.
 - 03.02 Demonstrate knowledge in the use of computer modeling programs as related to Emergency Management.
 - 03.03 Demonstrate knowledge of related warning and communications equipment.
 - 03.04 Recognize the inherent problems associated with multi-jurisdiction response.
 - 03.05 Demonstrate knowledge to assess the strengths and weaknesses of different sized response organizations.
 - 03.06 Demonstrate ability to manage emergency databases.
 - 03.07 Demonstrate knowledge of new technologies by applying, analyzing, and using new technologies.
 - 03.08 Demonstrate knowledge of natural hazards.
 - 03.09 Demonstrate knowledge of man-made hazards.
 - 03.10 Demonstrate ability to measure, monitor and predict natural hazards.
 - 03.11 Demonstrate ability to measure, monitor and predict man-made hazards.
 - 03.12 Demonstrate knowledge, skills and abilities to effectively manage a comprehensive emergency management program.
 - 03.13 Utilize interactive experience and knowledge to develop community-wide participation in planning, coordination and management capabilities and command and control operations of major and catastrophic disasters.
 - 03.14 Develop an understanding for the implementation of the general activities that should happen in each phase of a disaster.
 - 03.15 Develop and implement short and long term recovery concepts into all areas of the community using an all hazard approach.
- 04.0 DEMONSTRATE KNOWLEDGE OF THE ADMINISTRATION ROLE OF THE EMERGENCY MANAGER -- The student will be able to:
- 04.01 Recognize and identify different concepts of emergency planning.
 - 04.02 Demonstrate specialized knowledge and skills necessary to develop programs that will reduce losses from future disasters, emergencies, and other extreme events caused by natural and man-made hazards.
 - 04.03 Recognize and describe various aspects of organizational behavior.
 - 04.04 Analyze organizational behavior problems as they apply to emergency operations.
 - 04.05 Evaluate his/her personal leadership style as indicated by self-assessment instruments, with a goal of increasing leadership skill and enhancing style.
 - 04.06 Cite fundamental theories, facts, concepts, principles, and requirements of relevant federal and state (Florida) environment and safety legislation on emergency management organizations and agencies.
 - 04.07 Demonstrate knowledge of the responsibilities and reporting requirements of organizations.
 - 04.08 Cite fundamental theories, facts, concepts, principles, and the requirements of relevant federal environmental and safety

- legislation on emergency management organizations and private sector businesses.
- 04.09 Identify hazardous materials and explain the primary hazard presented by each through the use of such documents as the *Department of Transportation Emergency Response Guidebook*, related computer software and *Florida Division of Emergency Planning Guide*.
 - 04.10 Analyze the roles, responsibilities, and authorities of the various organizations responding to hazardous materials incidents.
 - 04.11 Demonstrate knowledge of the reporting requirements of industry through the SARA process and duties of the Local Emergency Planning Committees (LEPCs) and Florida Division of Emergency Management.
 - 04.12 Demonstrate ability to manage emergency databases.
 - 04.13 Demonstrate understanding of the impact of cultural differences in emergency management.
 - 04.14 Demonstrate ability to apply sociological research methodology in emergency management situations.
 - 04.15 Demonstrate understanding of social behavior in a disaster.
 - 04.16 Manage emergency management public education programs.
 - 04.17 Demonstrate the ability to write an EOP.
 - 04.18 Acquire the knowledge and skills to effectively manage and develop interaction involved in organizational/interpersonal relationships in emergency services.
 - 04.19 Gain the ability to assess personal qualities, values, and self-esteem in an attempt to develop a greater self-awareness. This knowledge will then be used to enhance individual interpersonal skills required in an emergency organizational structure.
 - 02.20 Acquire enhanced self-awareness, interpersonal skills, and knowledge of various leadership, influence, and decision models.
 - 02.21 Acquire the knowledge, skills and abilities to effectively use hazard analysis to establish policy based on review of community hazards, resources, and codes.
 - 02.22 Utilize interactive experience to analyze the effect of policy on specific emergency management roles, and use of policy analysis in the development of new policy.
 - 04.23 Acquire understanding of the important points of job analysis.
- 05.0 DEMONSTRATE KNOWLEDGE OF FEDERAL, STATE AND LOCAL MITIGATION PROGRAMS --
The student will:
- 05.01 Identify fundamental issues and concerns of hazard mitigation.
 - 05.02 Analyze mitigation history, philosophy, strategy, programs, and consequences.
 - 05.03 Demonstrate knowledge of the activities that should happen in each phase of a disaster.
 - 05.04 Demonstrate knowledge of natural hazards.
 - 05.05 Demonstrate knowledge of man-made hazards
 - 05.06 Demonstrate ability to measure, monitor and predict natural hazards.
 - 05.07 Acquire the knowledge, skills and abilities to effectively manage a comprehensive emergency management program.

- 05.08 Utilize interactive experience and knowledge to develop community-wide participation in planning, coordination and management functions designed to improve emergency management capabilities and command and control operations of major and catastrophic disasters.
- 05.09 Learn to develop and implement hazard mitigation concepts into all areas of the community, using an all hazard approach.
- 05.10 Acquire knowledge, skills and abilities to effectively use hazard analysis to establish policy based on review of community hazards resources and codes.
- 05.11 Utilize interactive experience to analyze the effect the policy on specific emergency management roles, and use of policy analysis in the development of new policy.
- 05.12 Learn to analyze the effect of public policy on a community before, during and after a simulated and real disaster.

06.0 DEMONSTRATE KNOWLEDGE OF LONG AND SHORT TERM RECOVERY PROGRAMS -- The student will be able to:

- 06.01 Conduct a business impact assessment.
- 06.02 Develop a contingency plan/business recovery plan.
- 06.03 Demonstrate understanding of business recovery strategies and recognize benefits.
- 06.04 Demonstrate ability to maintain the plan by testing, evaluating and revising business recovery strategies.
- 06.05 Acquire knowledge of benefits of corporate responsibility.
- 06.06 Acquire the knowledge, skills and abilities to effectively manage a comprehensive emergency management program.
- 06.07 Utilize interactive experience and knowledge to develop community-wide participation in planning, coordination and management functions designed to improve emergency management capabilities and command and control operations during recovery operations at major and catastrophic disasters.
- 06.08 Learn to develop and implement short and long term recovery concepts into all areas of the community, using an all hazard approach.

07.0 DEMONSTRATE KNOWLEDGE OF THE FACILITIES AND EQUIPMENT USED IN COMPREHENSIVE EMERGENCY MANAGEMENT -- The student will be able to:

- 07.01 Demonstrate knowledge of related warning and communications equipment.
- 07.02 Demonstrate knowledge of cite local, state, federal and private programs available for response to disasters.
- 07.03 Recognize the inherent problems associated with multi-jurisdictional response.
- 07.04 Demonstrate knowledge of the principles of planning under Federal planning guidance such as National Response Team-1, and Civil Preparedness Guide.
- 07.05 Demonstrate knowledge of new technologies by applying, and using new technologies.
- 07.06 Analyze the effect of public policy on a community before, during and after a simulated and real disaster.

08.0 DEMONSTRATE KNOWLEDGE OF PROFESSIONAL DEVELOPMENT FOR ADVANCEMENT WITHIN
THE PROFESSION -- The student will be able to:

- 08.01 Acquire enhanced self-awareness, interpersonal skills, and knowledge of various leadership, influence, and decision models.
- 08.02 Demonstrate understanding of knowledge, skills and abilities necessary to understand emergency management as a field of research and practice.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Environmental Science Technology
Occupational Area: Public Service Occupations

PSV

CIP Number 0715.059901
Grade Level College Credits
Length AS Degree/64 Hours

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as environmental pollution control technicians, or environmental technicians (029.261-014) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, conducting environmental surveys, and investigations and evaluations of noise, air and water conditions to determine compliance with public laws and regulations.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities incorporate practical application of scientific principles.
- III. **SPECIAL NOTE:** The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

01.0 Demonstrate knowledge of the principles of managing and remediation of water pollution.

- 02.0 Demonstrate knowledge of the principles of managing and remediation of air pollution.
- 03.0 Demonstrate awareness of environmental noise sources and their monitoring.
- 04.0 Operate and calibrate laboratory and field instruments used in quantitative and qualitative analysis of pollutants.
- 05.0 Sample, analyze and calculate data related to air and water pollutants.
- 06.0 Demonstrate an awareness of radiation monitoring and radioactive contamination control.
- 07.0 Demonstrate and awareness of solid waste, the problems engendered by solid waste accumulation and disposal and solutions to those problems.
- 08.0 Demonstrate employability skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Environmental Science Technology
Secondary Number:
Postsecondary Number: 0715.059901

01.0 DEMONSTRATE KNOWLEDGE OF THE PRINCIPLES OF MANAGING AND REMEDIATION OF WATER POLLUTION--The student will be able to:

- 01.01 Determine chemical and physical properties of water.
- 01.02 Describe microbial systems.
- 01.03 Describe surface water, groundwater systems, hydrologic cycle, and potable water treatment processes.
- 01.04 Describe the marine environment.
- 01.05 Identify types and sources of water contamination.
- 01.06 Describe legal aspects and consequences of pollution.
- 01.07 Collect water samples for analysis.
- 01.08 Identify the accepted water quality standards for effluent from wastewater treatment plants.
- 01.09 Identify the correct and accepted water quality standards for industrial waste effluent.
- 01.10 Demonstrate the technology applied to non-point source pollution control (stormwater and agriculture runoff).

02.0 DEMONSTRATE KNOWLEDGE OF THE PRINCIPLES OF MANAGING AND REMEDIATION OF AIR POLLUTION--The student will be able to:

- 02.01 Define and discuss atmosphere, meteorology and topography.
- 02.02 Identify natural and manmade pollutants; their sources, effects, and control techniques.
- 02.03 Collect and analyze air samples.
- 02.04 Describe legal aspects and consequences of air pollution.
- 02.05 List the regulated parameters of emission for selected industrial sources.
- 02.06 List the types of air pollution control devices used to control emissions of sulfur oxides, nitrogen oxides, particulates and volatile organic contaminants.
- 02.07 Measure the air pollutant of a specific source.
- 02.08 Record, interpret and report laboratory analyses.

03.0 DEMONSTRATE AWARENESS OF ENVIRONMENTAL NOISE SOURCES AND THEIR MONITORING--The student will be able to:

- 03.01 Define and discuss the physical properties of sound.
- 03.02 Discuss the threshold of hearing, tolerance, and hearing loss.
- 03.03 Discuss environmental noise, its effect on humans, and solutions to noise pollution.
- 03.04 Discuss legal aspects and consequences of noise pollution.
- 03.05 List the sources of noise.
- 03.06 Select the regulatory agency that controls noise sources.
- 03.07 List the control devices for different noise sources.

04.0 OPERATE AND CALIBRATE LABORATORY AND FIELD INSTRUMENTS USED IN QUANTITATIVE AND QUALITATIVE ANALYSIS OF POLLUTANTS--The student will be able to:

- 04.01 Demonstrate knowledge of basic laboratory operation.
- 04.02 Operate and calibrate selected laboratory instruments.
- 04.03 Operate and calibrate selected field instruments and equipment.

05.0 SAMPLE, ANALYZE AND CALCULATE DATA RELATED TO AIR AND WATER POLLUTANTS--The student will be able to:

- 05.01 Gather and analyze selected samples.
- 05.02 Manipulate data and reach firm conclusions.
- 05.03 Write selected formal technical reports.
- 05.04 Identify and perform the correct analysis for selected air pollutants listed with state and federal regulations.
- 05.05 Identify and perform the correct analysis for selected parameters listed with state and federal regulations for wastewater effluent.

06.0 DEMONSTRATE AN AWARENESS OF RADIATION MONITORING AND RADIOACTIVE CONTAMINATION CONTROL--The student will be able to:

- 06.01 Discuss atomic structure, radiation and radioactive decay.
- 06.02 Discuss types and sources of radiation.
- 06.03 Demonstrate knowledge of radiation exposure and dosimetry experiments.
- 06.04 Discuss the immediate and long range effects of radiation on animals and plants.
- 06.05 Discuss nuclear power plant design, nuclear power hazards, and safety features.
- 06.06 Discuss nuclear fuel reprocessing and storage.
- 06.07 Discuss legal aspects and consequences of radioactive pollution.

07.0 DEMONSTRATE AN AWARENESS OF SOLID WASTE, THE PROBLEMS ENGENDERED BY SOLID WASTE ACCUMULATION AND DISPOSAL AND SOLUTIONS TO THOSE PROBLEMS--The student will be able to:

- 07.01 Discuss the composition, sources and quantity of solid waste.
- 07.02 Discuss methods of solid waste disposal.
- 07.03 Discuss various solutions to solid waste accumulations and disposal.
- 07.04 Discuss the legal aspects and consequences of solid waste pollution.
- 07.05 Identify the solid wastes from domestic households, municipalities and industry.
- 07.06 Identify a sanitary landfill.
- 07.07 Discuss the construction features of a safe landfill.
- 07.08 Discuss the possibilities of contaminants (leachates) seeping into the groundwater.
- 07.09 Discuss the need to have monitoring well located around a sanitary landfill.

07.10 Discuss those wastes that are permitted by state and federal regulation to be disposed at a landfill site.

08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 08.01 Conduct a job search.
- 08.02 Secure information about a job.
- 08.03 Identify documents that may be required when applying for a job.
- 08.04 Complete a job application.
- 08.05 Demonstrate competence in job interview techniques.
- 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 08.07 Identify acceptable work habits.
- 08.08 Demonstrate knowledge of how to make job changes appropriately.
- 08.09 Demonstrate acceptable employee health habits.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Environmental Specialist
Occupational Area: Public Service Occupations

Secondary

Program Numbers 8912000
CIP Number 0715.059900
Grade Level 9-12, 30, 31
Length 3 credits
Certification WSP OPER @7 G
TEC CHEM @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to give students experience with the basic academic skills and competencies associated with a broad range of occupations in the environmental sciences. This is to assist the student in making informed decisions regarding their postsecondary academic and occupational goals.

The content includes, but is not limited to instruction that initiates the student to the practice and science of natural resource and wildlife conservation and management. The subject matter includes soil and water conservation, wildlife studies, environmental inventory methods and instruments, map reading and orienteering skills, data collection, geological processes and physiography, hydrology, waste management, controlled burning, report writing, construction of technical instruments, random sampling methods, resource conservation and career opportunities.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Hands-on laboratory experiences, both in the classroom and in the field, are an integral part of this course and include the use of field instruments, terrestrial and aquatic measurement kits, photographic equipment, microscopes, laboratory apparatus and chemicals, soil, water and air sampling equipment, and maps.
- III. **SPECIAL NOTE:** These program courses may be offered in combination with traditional secondary science courses in a high school setting. It is recommended that the courses for the Environmental Specialist Program be as follows:

8912001 - Environmental Specialist I
8912002 - Environmental Specialist II
8912003 - Environmental Specialist III

Each course must be taught by a teacher properly certified for the course.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Explain the geological and hydrological processes that contribute to the stratigraphy and physiography of the Coastal Plains.
- 02.0 Assist in monitoring meteorological phenomena.
- 03.0 Demonstrate how solar energy can be applied to reduce fossil fuel consumption.
- 04.0 Assist in collecting and testing samples used to determine soil characteristics.
- 05.0 Determine the quality and quantity of water resources.
- 06.0 Demonstrate orienteering and map reading skills.
- 07.0 Identify technological sources of population stress and decline.
- 08.0 Conduct vegetation analyses.
- 09.0 Collect, classify and preserve samples and specimens of native flora and fauna.
- 10.0 Collect, record and analyze data.
- 11.0 Compare and contrast the natural history of native and exotic wildlife.
- 12.0 Describe game and non-game wildlife programs in the State of Florida.
- 13.0 Investigate dominant forest types in the Coastal Plains.
- 14.0 Explain the significance of fire in ecological management.
- 15.0 Demonstrate the use and significance of randomness in sampling practices.
- 16.0 Practice resource conservation.
- 17.0 Participate in the management of public lands.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Environmental Specialist
Secondary Number: 8912000
Postsecondary Number:

01.0 EXPLAIN THE GEOLOGICAL AND HYDROLOGICAL PROCESSES THAT CONTRIBUTE TO THE STRATIGRAPHY AND PHYSIOGRAPHY OF THE COASTAL PLAINS--The student will be able to:

- 01.01 Describe the three different types of sediments of Panhandle Florida's surface geology.
- 01.02 Explain the role of glaciation in terrace formation.
- 01.03 Demonstrate how prograding of alluvial sediments builds landforms.
- 01.04 Describe the role of ocean currents in the formation of barrier islands, spits and peninsulas.
- 01.05 Describe the principle physiographic regions of the Florida Panhandle.

02.0 ASSIST IN MONITORING METEOROLOGICAL PHENOMENA--The student will be able to:

- 02.01 Interpret a weather map.
- 02.02 Obtain and record measurements of local rainfall, temperature, air pressure, relative humidity, cloud cover and type, and wind speed.
- 02.03 Demonstrate the use of a hurricane tracking chart.
- 02.04 Demonstrate the difference between convection, conduction and radiation of heat energy.
- 02.05 Construct a model of the Greenhouse Effect.
- 02.06 Describe the function of the ozone layer and the impact of technology on it.
- 02.07 Construct and demonstrate the use of a water barometer, cup anemometer and rain gauge.
- 02.08 Demonstrate the use of a sling psychrometer.

03.0 DEMONSTRATE HOW SOLAR ENERGY CAN BE APPLIED TO REDUCE FOSSIL FUEL--The student will be able to:

- 03.01 Construct and demonstrate a solar water distiller.
- 03.02 Construct and demonstrate a solar oven.
- 03.03 Design a wind generated water pump.
- 03.04 Construct and demonstrate a sundial.
- 03.05 Demonstrate the mechanical operation of a solar hot water heater.
- 03.06 Prepare a report on advanced solar technology.
- 03.07 Discuss alternative energy sources and technology.

04.0 ASSIST IN COLLECTING AND TESTING SAMPLES USED TO DETERMINE SOIL CHARACTERISTICS--The student will be able to:

BEST COPY AVAILABLE

- 04.01 Collect soil samples from test area and complete soil data forms.
 - 04.02 Determine soil pH using pH test kit.
 - 04.03 Conduct soil mineral and elemental analysis using soil test kit.
 - 04.04 Determine and record texture, structure temperature and color of each soil layer.
 - 04.05 Construct a soil micromonolith of a soil profile or soil pit.
 - 04.06 Analyze soil data and write lab report.
- 05.0 DETERMINE THE QUALITY AND QUANTITY OF WATER RESOURCES--The student will be able to:
- 05.01 Identify present and potential sources of water pollution.
 - 05.02 Determine stream flow.
 - 05.03 Collect, store and label water samples from a representative test site.
 - 05.04 Determine the quality of water samples by measuring for pH, turbidity, dissolved solids and dissolved oxygen.
 - 05.05 Investigate water shed boundaries and drainage patterns.
 - 05.06 Monitor water levels of rivers, streams, ponds and lakes.
 - 05.07 Identify and monitor erosion hazards and environmental quality.
- 06.0 DEMONSTRATE ORIENTEERING AND MAP READING SKILLS--The student will be able to:
- 06.01 Interpret legal land descriptions.
 - 06.02 Explain topographic map symbols and legends.
 - 06.03 Measure acreage on maps.
 - 06.04 Determine location and other information from maps.
 - 06.05 Measure elevation in the field using a clinometer.
 - 06.06 Identify three major parts of a compass.
 - 06.07 Demonstrate the proper use of a compass.
 - 06.08 Demonstrate sighting along a given bearing.
 - 06.09 Describe compass declination and variation.
 - 06.10 Complete a traverse of three bearings and three distances within a 5' error.
- 07.0 IDENTIFY TECHNOLOGICAL SOURCES OF POPULATION STRESS AND DECLINE--The student will be able to:
- 07.01 Trace the effects of pollution through a food chain.
 - 07.02 Demonstrate knowledge of biodegradable and non-biodegradable products.
 - 07.03 Explain the difference between organic farming and farming practices that incorporate the use of biocides and inorganic fertilizers and their comparative effects on the environment.
 - 07.04 Describe solid waste disposal methods and groundwater contamination.
 - 07.05 Demonstrate how fossil fuels contribute to acid rain and petrochemical pollution.
 - 07.06 Research and list pro and con attributes of nuclear energy including irradiation of agricultural products.

08.0 CONDUCT VEGETATION ANALYSES--The student will be able to:

- 08.01 Demonstrate the proper use of field instruments.
- 08.02 Conduct a quadrat analysis.
- 08.03 Conduct a line transect analysis.
- 08.04 Conduct a belt transect analysis.
- 08.05 Conduct a random pairs analysis.
- 08.06 Perform a comprehensive ecological study of a forest.

09.0 COLLECT, CLASSIFY AND PRESERVE SAMPLES AND SPECIMENS OF NATIVE FLORA AND FAUNA--The student will be able to:

- 09.01 Demonstrate the proper use of sweep nets, plankton nets, dip nets, cast nets, seine nets, pit-fall traps, aspirator bottles, and other live traps.
- 09.02 Assist in the supervised deployment of a drift fence and mist net.
- 09.03 Prepare plant mounts with a plant press.
- 09.04 Demonstrate the use of field guides.
- 09.05 Construct a dichotomous key.
- 09.06 Explain the basis of modern classification.
- 09.07 Demonstrate or explain how to preserve animal specimens.
- 09.08 Demonstrate proper use of microscopes and stereoscopes.
- 09.09 Prepare photographic journal of specimens.

10.0 COLLECT, RECORD AND ANALYZE DATA--The student will be able to:

- 10.01 Maintain lab journal.
- 10.02 Construct data tables.
- 10.03 Compile data.
- 10.04 Make inferences from data.

11.0 COMPARE AND CONTRAST THE NATURAL HISTORY OF NATIVE AND EXOTIC WILDLIFE--
The student will be able to:

- 11.01 List several introduced exotics in Florida.
- 11.02 Research and present the natural history of native plants and animals.
- 11.03 Explain how lack of predation contributes to uncontrollable exotic populations.
- 11.04 Explain how exotic populations stress native populations occupying the same niche.
- 11.05 Develop and discuss theoretical strategies for managing/eradicating exotic species.
- 11.06 Identify agricultural weeds that have invaded old field sites.

12.0 DESCRIBE GAME AND NON-GAME WILDLIFE PROGRAMS IN THE STATE OF FLORIDA--
The student will be able to:

- 12.01 Explain the laws of hunting and fishing.
- 12.02 Explain the laws that protect non-game species.
- 12.03 Identify endangered species in Florida.

- 12.04 Identify state, federal and private programs that purchase and protect wildlife habitat.
- 12.05 Participate in the protection of wildlife habitat.
- 13.0 INVESTIGATE DOMINANT FOREST TYPES IN THE COASTAL PLAINS--The student will be able to:
 - 13.01 Investigate the (soils, ecology, flora and fauna of the) longleaf pine ecosystem.
 - 13.02 Investigate the (soils, ecology, flora and fauna of the) Beech-Magnolia climax forest.
 - 13.03 Investigate the (soils, ecology, flora and fauna of) gully eroded ravines and steepheads.
 - 13.04 Investigate the soils, ecology, flora and fauna of beach, dune and scrub habitat.
 - 13.05 Investigate the soils, ecology, flora and fauna of man-made old fields and silvicultural communities.
- 14.0 DEMONSTRATE THE SIGNIFICANCE OF FIRE IN ECOLOGICAL MANAGEMENT OF FORESTS--The student will be able to:
 - 14.01 Explain the Much theory.
 - 14.02 Explain how the longleaf pine/wiregrass ecosystem is a fire dependent sub-climax forest.
 - 14.03 Demonstrate how burning of vegetation releases nutrients into the soil.
 - 14.04 Investigate the merits of growing season burns.
 - 14.05 Assist in the supervised burning of a forest stand.
 - 14.06 Demonstrate personal safety precautions for controlled burns.
 - 14.07 Demonstrate the functions of firelanes and backfires.
 - 14.08 Use appropriate hand tools to control fire.
- 15.0 DEMONSTRATE THE USE AND SIGNIFICANCE OF RANDOMNESS IN SAMPLING PRACTICES--The student will be able to:
 - 15.01 Define a population.
 - 15.02 Demonstrate the three steps of statistical analysis.
 - 15.03 Define a sample.
 - 15.04 Define and explain the significance of randomness in population studies.
 - 15.05 Demonstrate the random selection of a sample from a finite population.
 - 15.06 Demonstrate the use of a random numbers table.
- 16.0 PRACTICE RESOURCE CONSERVATION--The student will be able to:
 - 16.01 Define renewable and nonrenewable resources.
 - 16.02 Demonstrate or describe soil and water conservation practices.
 - 16.03 Describe the laws that protect wetlands and govern wetland irrigation.
 - 16.04 Participate in wildlife and habitat conservation.

- 16.05 Describe alternative sources of energy to replace fossil fuel consumption.
- 16.06 Develop and implement resource conservation strategies for the home, school and community.

17.0 PARTICIPATE IN THE MANAGEMENT OF PUBLIC LANDS--The student will be able to:

- 17.01 Adopt and co-manage a parcel of state or federal land.
- 17.02 Demonstrate communication and human relations skills.
- 17.03 Perform public service.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8912001
Course Title: Environmental Specialist I
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to develop competency in the areas of meteorology, solar energy, soil science, map reading, and orienteering. Additionally, skills and subject matter relating to Florida's geology, physiography, water resources and management of public lands will be covered.

01.0 EXPLAIN THE GEOLOGICAL AND HYDROLOGICAL PROCESSES THAT CONTRIBUTE TO THE STRATIGRAPHY AND PHYSIOGRAPHY OF THE COASTAL PLAINS--The student will be able to:

- 01.01 Describe the three different types of sediments of Panhandle Florida's surface geology.
- 01.02 Explain the role of glaciation in terrace formation.
- 01.03 Demonstrate how prograding of alluvial sediments builds landforms.
- 01.04 Describe the role of ocean currents in the formation of barrier islands, spits and peninsulas.
- 01.05 Describe the principle physiographic regions of the Florida Panhandle.

02.0 ASSIST IN MONITORING METEOROLOGICAL PHENOMENA--The student will be able to:

- 02.01 Interpret a weather map.
- 02.02 Obtain and record measurements of local rainfall, temperature, air pressure, relative humidity, cloud cover and type, and wind speed.
- 02.03 Demonstrate the use of a hurricane tracking chart.
- 02.04 Demonstrate the difference between convection, conduction and radiation of heat energy.
- 02.05 Construct a model of the Greenhouse Effect.
- 02.06 Describe the function of the ozone layer and the impact of technology on it.
- 02.07 Construct and demonstrate the use of a water barometer, cup anemometer and rain gauge.
- 02.08 Demonstrate the use of a sling psychrometer.

03.0 DEMONSTRATE HOW SOLAR ENERGY CAN BE APPLIED TO REDUCE FOSSIL FUEL CONSUMPTION--The student will be able to:

- 03.01 Construct and demonstrate a solar water distiller.
- 03.02 Construct and demonstrate a solar oven.
- 03.03 Design a wind generated water pump.
- 03.04 Construct and demonstrate a sundial.

- 03.05 Demonstrate the mechanical operation of a solar hot water heater.
- 03.06 Prepare a report on advanced solar technology.
- 03.07 Discuss alternative energy sources and technology.
- 04.0 ASSIST IN COLLECTING AND TESTING SAMPLES USED TO DETERMINE SOIL CHARACTERISTICS--The student will be able to:
 - 04.01 Collect soil samples from test area and complete soil data forms.
 - 04.02 Determine soil pH using pH test kit.
 - 04.03 Conduct soil mineral and elemental analysis using soil test kit.
 - 04.04 Determine and record texture, structure temperature and color of each soil layer.
 - 04.05 Construct a soil micromonolith of a soil profile or soil pit.
 - 04.06 Analyze soil data and write lab report.
- 05.0 DETERMINE THE QUALITY AND QUANTITY OF WATER RESOURCES--The student will be able to:
 - 05.01 Identify present and potential sources of water pollution.
 - 05.02 Determine stream flow.
 - 05.03 Collect, store and label water samples from a representative test site.
 - 05.04 Determine the quality of water samples by measuring for pH, turbidity, dissolved solids and dissolved oxygen.
 - 05.05 Investigate water shed boundaries and drainage patterns.
 - 05.06 Monitor water levels of rivers, streams, ponds and lakes.
 - 05.07 Identify and monitor erosion hazards and environmental quality.
- 06.0 DEMONSTRATE ORIENTEERING AND MAP READING SKILLS--The student will be able to:
 - 06.01 Interpret legal land descriptions.
 - 06.02 Explain topographic map symbols and legends.
 - 06.03 Measure acreage on maps.
 - 06.04 Determine location and other information from maps.
 - 06.05 Measure elevation in the field using a clinometer.
 - 06.06 Identify three major parts of a compass.
 - 06.07 Demonstrate the proper use of a compass.
 - 06.08 Demonstrate sighting along a given bearing.
 - 06.09 Describe compass declination and variation.
 - 06.10 Complete a traverse of three bearings and three distances within a 5' error.
- 10.0 COLLECT, RECORD AND ANALYZE DATA--The student will be able to:
 - 10.01 Maintain lab journal.
 - 10.02 Construct data tables.
 - 10.03 Compile data.
 - 10.04 Make inferences from data.

17.0 PARTICIPATE IN THE MANAGEMENT OF PUBLIC LANDS--The student will be able to:

- 17.01 Adopt and co-manage a parcel of state or federal land.
- 17.02 Demonstrate communication and human relations skills.
- 17.03 Perform public service.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8912002
Course Title: Environmental Specialist II
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to develop competency in vegetation analyses, collection and identification of native flora and fauna, introduction of exotics, fire ecology, statistical methodology, and participation in resource conservation.

07.0 IDENTIFY TECHNOLOGICAL SOURCES OF POPULATION STRESS AND DECLINE--The student will be able to:

- 07.01 Trace the effects of pollution through a food chain.
- 07.02 Demonstrate knowledge of biodegradable and non-biodegradable products.
- 07.03 Explain the difference between organic farming and farming practices that incorporate the use of biocides and inorganic fertilizers and their comparative effects on the environment.
- 07.04 Describe solid waste disposal methods and groundwater contamination.
- 07.05 Demonstrate how fossil fuels contribute to acid rain and petrochemical pollution.
- 07.06 Research and list pro and con attributes of nuclear energy including irradiation of agricultural products.

08.0 CONDUCT VEGETATION ANALYSES--The student will be able to:

- 08.01 Demonstrate the proper use of field instruments.
- 08.02 Conduct a quadrat analysis.
- 08.03 Conduct a line transect analysis.
- 08.04 Conduct a belt transect analysis.
- 08.05 Conduct a random pairs analysis.
- 08.06 Perform a comprehensive ecological study of a forest.

09.0 COLLECT, CLASSIFY AND PRESERVE SAMPLES AND SPECIMENS OF NATIVE FLORA AND FAUNA--The student will be able to:

- 09.01 Demonstrate the proper use of sweep nets, plankton nets, dip nets, cast nets, seine nets, pit-fall traps, aspirator bottles, and other live traps.
- 09.02 Assist in the supervised deployment of a drift fence and mist net.
- 09.03 Prepare plant mounts with a plant press.
- 09.04 Demonstrate the use of field guides.
- 09.05 Construct a dichotomous key.
- 09.06 Explain the basis of modern classification.
- 09.07 Demonstrate or explain how to preserve animal specimens.

- 09.08 Demonstrate proper use of microscopes and stereoscopes.
- 09.09 Prepare photographic journal of specimens.
- 11.0 COMPARE AND CONTRAST THE NATURAL HISTORY OF NATIVE AND EXOTIC WILDLIFE--
The student will be able to:
 - 11.01 List several introduced exotics in Florida.
 - 11.02 Research and present the natural history of native plants and animals.
 - 11.03 Explain how lack of predation contributes to uncontrollable exotic populations.
 - 11.04 Explain how exotic populations stress native populations occupying the same niche.
 - 11.05 Develop and discuss theoretical strategies for managing/eradicating exotic species.
 - 11.06 Identify agricultural weeds that have invaded old field sites.
- 12.0 DESCRIBE GAME AND NON-GAME WILDLIFE PROGRAMS IN THE STATE OF FLORIDA--
The student will be able to:
 - 12.01 Explain the laws of hunting and fishing.
 - 12.02 Explain the laws that protect non-game species.
 - 12.03 Identify endangered species in Florida.
 - 12.04 Identify state, federal and private programs that purchase and protect wildlife habitat.
 - 12.05 Participate in the protection of wildlife habitat.
- 13.0 INVESTIGATE DOMINANT FOREST TYPES IN THE COASTAL PLAINS--The student will be able to:
 - 13.01 Investigate the (soils, ecology, flora and fauna of the) longleaf pine ecosystem.
 - 13.02 Investigate the (soils, ecology, flora and fauna of the) Beech-Magnolia climax forest.
 - 13.03 Investigate the (soils, ecology, flora and fauna of) gully eroded ravines and steepheads.
 - 13.04 Investigate the soils, ecology, flora and fauna of beach, dune and scrub habitat.
 - 13.05 Investigate the soils, ecology, flora and fauna of man-made old fields and silvicultural communities.
- 14.0 DEMONSTRATE THE SIGNIFICANCE OF FIRE IN ECOLOGICAL MANAGEMENT OF FORESTS--The student will be able to:
 - 14.01 Explain the Much theory.
 - 14.02 Explain how the longleaf pine/wiregrass ecosystem is a fire dependent sub-climax forest.
 - 14.03 Demonstrate how burning of vegetation releases nutrients into the soil.
 - 14.04 Investigate the merits of growing season burns.
 - 14.05 Assist in the supervised burning of a forest stand.
 - 14.06 Demonstrate personal safety precautions for controlled burns.
 - 14.07 Demonstrate the functions of firelanes and backfires.
 - 14.08 Use appropriate hand tools to control fire.

15.0 DEMONSTRATE THE USE AND SIGNIFICANCE OF RANDOMNESS IN SAMPLING PRACTICES--The student will be able to:

- 15.01 Define a population.
- 15.02 Demonstrate the three steps of statistical analysis.
- 15.03 Define a sample.
- 15.04 Define and explain the significance of randomness in population studies.
- 15.05 Demonstrate the random selection of a sample from a finite population.
- 15.06 Demonstrate the use of a random numbers table.

16.0 PRACTICE RESOURCE CONSERVATION--The student will be able to:

- 16.01 Define renewable and non-renewable resources.
- 16.02 Demonstrate or describe soil and water conservation practices.
- 16.03 Describe the laws that protect wetlands and govern wetland irrigation.
- 16.04 Participate in wildlife and habitat conservation.
- 16.05 Describe alternative sources of energy to replace fossil fuel consumption.
- 16.06 Develop and implement resource conservation strategies for the home, school and community.

Program: 8912000 Environmental Specialist

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8912003

Course Title: Environmental Specialist III

Course Credit: 1

COURSE DESCRIPTION:

The cooperative method of instruction may be used to allow students to practice Environmental Technology skills on the job. Students may opt to enter an apprenticeship program or may have on the job clinical experience. These experiences cover all the program student performance standards. Environmental Specialist I and II are pre-requisite to this course.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Fire Fighting
Occupational Area: Public Service Occupations

Secondary

PSAV

Program Numbers	8918100	P430205
CIP Number	0743.020300	0743.020300
Grade Level	12, 30, 31	30, 31
Length	2 credits	360 hours
Certification	FIRE FIGHT @7 G	FIRE FIGHT @7 G
	PUB SERV @7 G	PUB SERV @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as fire fighters (63008464) or to provide supplemental training for persons previously or currently employed in this occupation. The program prepares students for certification as a firefighter in accordance with Florida Statutes 633. The program must be approved by the Division of State Fire Marshal, Bureau of Fire Standards and Training.

Outcomes and Student Performance Standards in this program have been adapted from the National Fire Protection Association Fire Fighter Professional Qualifications (NFPA 1001) for Fire Fighter I and II, as regulated by the Florida Bureau of Fire Standards and Training, Florida Statutes 633 and State Fire Marshal Rules.

The content includes, but is not limited to, orientation to the fire service, fire alarms and communication, apparatus and equipment, fire behavior, portable extinguishers, fire streams, fundamentals of extinguishment, ladders, hoses, tools and equipment, forcible entry, salvage, overhaul, ventilation, rescue, protective breathing equipment, first responder, water supplies, principles of inservice inspections, safety, controlled burning, employability skills and first responder techniques.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

Listed below are the courses that comprise this program when offered at the secondary level:

8918110 - Fire Fighting 1
8918120 - Fire Fighting 2

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities are included as an integral part of this program.

The Rules of the State Fire Marshal Chapter 4A-37, Standards and Training, state: In demonstrations involving the use of equipment and performance of tasks under nonhazardous conditions, whether in the classroom or the field, there shall be no less than one certified instructor for each ten students participating in the demonstrations.

In field work involving the handling of equipment and performance of tasks under conditions considered hazardous, there shall be no less than one certified instructor for each six students, but in no case shall there be less than two certified instructors on the scene. The instructors shall be placed to oversee the safety and effectiveness of the training.

- III. **SPECIAL NOTE:** Florida Public Service Association, is the appropriate vocational student organization for providing leadership training and reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

Completing this program and passing the Minimum Standards Examination of the Bureau of Fire Standards and Training (written and practical) are required before program completers can be certified.

Besides certification, which must be attained within one year of initial employment as a fire fighter, other basic requirements for employment include high school graduation or equivalent, not convicted of a felony, having fingerprints on file, passing physical examination, and good moral character. Refer to F.S. 633 and State Fire Marshal Rules for specifics.

The minimum length of this program is 360 hours as established by Florida Statutes 633 and State Fire Marshal Rules.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 10.0, Reading 10.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program/course should be reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

Definitions: The following are definitions taken from NFPA 1001:

define:	to describe the basic qualities and principles
demonstrate:	to show by actual use
identify:	to physically select, indicate, or explain verbally or in writing, using standard terms recognized in the fire service.

NOTE: When the word demonstrate is used in a standard, it shall require that actual performance and operation be accomplished, unless otherwise indicated. Simulation, explanation, and illustration may be substituted when actual operation is not feasible.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Demonstrate knowledge of fire department organization and procedures.
- 02.0 Use fire alarms and communications equipment.
- 03.0 Demonstrate knowledge of fire behavior.
- 04.0 Use portable fire extinguishers.
- 05.0 Use self-contained breathing apparatus.
- 06.0 Demonstrate knowledge of fire apparatus.
- 07.0 Use forcible entry equipment.
- 08.0 Demonstrate ventilation practices.
- 09.0 Use ropes, tools, and equipment.
- 10.0 Demonstrate rescue procedures.
- 11.0 Demonstrate safety procedures.
- 12.0 Use ladders.
- 13.0 Use fire hose, nozzles, and applicances.
- 14.0 Use fire streams.
- 15.0 Use water supplies.
- 16.0 Use sprinkler systems.
- 17.0 Demonstrate salvage procedures.
- 18.0 Demonstrate overhaul procedures.
- 19.0 Follow fire prevention inspection practices.
- 20.0 Demonstrate knowledge of the fundamentals of extinguishment.
- 21.0 Follow health and human relations practices.
- 22.0 Provide emergency medical care.
- 23.0 Participate in a physical fitness program.
- 24.0 Participate in fire training examinations.
- 25.0 Participate in controlled burning exercises.
- 26.0 Obtain certification as a fire fighter.
- 27.0 Demonstrate knowledge of sexually transmitted diseases, including AIDS.
- 28.0 Demonstrate proficiency in First Responder to Medical Emergencies techniques.
- 29.0 Demonstrate proper response to hazardous materials incidents.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Fire Fighting
Secondary Number: 8918100
Postsecondary Number: P430205

01.0 DEMONSTRATE KNOWLEDGE OF FIRE DEPARTMENT ORGANIZATION AND PROCEDURES--
The student will be able to:

- 01.01 Identify the organization of the fire department.
- 01.02 Identify the size of the fire department, the scope of its operation, and the standard operational procedures.
- 01.03 Identify the fire department rules and regulations that apply to the position of firefighter.
- 01.04 Identify responsibilities of the fire fighter in determining the point of origin, cause, and protection of evidence in fires.
- 01.05 Identify procedures for shutting off the gas services to a building.
- 01.06 Identify procedures for shutting off electrical service to a building.

02.0 USE FIRE ALARMS AND COMMUNICATIONS EQUIPMENT--The student will be able to:

- 02.01 Define the procedure for a citizen to report a fire or other emergency.
- 02.02 Demonstrate receiving an alarm or a report of an emergency, and initiate action.
- 02.03 Define the purpose and function of all alarm-receiving instruments and personnel-alerting equipment in the fire station.
- 02.04 Identify traffic control devices installed in the fire station to facilitate the response of apparatus.
- 02.05 Identify prescribed fire department radio procedures.
- 02.06 Define policy and procedures concerning the ordering and transmitting of multiple alarms of fire and calls for special assistance from the emergency scene.
- 02.07 Identify areas assigned for first-alarm response.
- 02.08 Demonstrate both mobile and portable radio equipment.
- 02.09 Identify fire department radio procedures.
- 02.10 Identify supervisory alarm equipment provided in the fire station and prescribed action to be taken upon receipt of designated signals.
- 02.11 Identify fire location indicators provided to direct fire fighters to specific locations in protected public or private properties.

03.0 DEMONSTRATE KNOWLEDGE OF FIRE BEHAVIOR--The student will be able to:

- 03.01 Define fire.
- 03.02 Define the fire triangle and tetrahedron.

- 03.03 Identify two chemical, mechanical, and electrical energy heat sources.
 - 03.04 Define the following potential stages of fire: (a) incipient; (b) flame spread; (c) hot smoldering; (d) flash over; (e) steady state; (f) clear burning.
 - 03.05 Define the three methods of heat transfer.
 - 03.06 Define the three physical stages of matter in which fuels are commonly found.
 - 03.07 Define the hazard of finely divided fuels as they relate to the combustion process.
 - 03.08 Define flash point, fire point, and ignition temperature.
 - 03.09 Define concentrations of oxygen in air as it affects combustion.
 - 03.10 Identify three products of combustion commonly found in structural fires which create a life hazard.
 - 03.11 Define the following units of heat measurement: (a) British Thermal Unit (BTU); (b) Fahrenheit (°F); (c) Celsius (°C); (d) Calorie (C).
 - 03.12 Define thermal balance and imbalance.
- 04.0 USE PORTABLE FIRE EXTINGUISHERS--The student will be able to:
- 04.01 Identify the classification of types of fire as they relate to the use of portable extinguishers.
 - 04.02 Given a group of differing extinguishers, identify the appropriate extinguishers for the various classes of fire.
 - 04.03 Define the portable extinguisher rating system.
 - 04.04 Demonstrate the use of portable fire extinguishers for each class of fire.
- 05.0 USE SELF-CONTAINED BREATHING APPARATUS--The student will be able to:
- 05.01 Identify at least four hazardous respiratory environments encountered in fire fighting.
 - 05.02 Demonstrate the use of all types of self-contained breathing apparatus in a dense smoke environment.
 - 05.03 Identify the physical requirements of the wearer, the limitations of the self-contained breathing apparatus, and the safety features of all types of self-contained breathing apparatus.
 - 05.04 Demonstrate donning self-contained breathing apparatus while wearing protective clothing.
 - 05.05 Demonstrate that the self-contained breathing apparatus is in a safe condition for immediate use.
 - 05.06 Identify the procedure for cleaning and sanitizing self-contained breathing apparatus for future use.
 - 05.07 Identify the procedure for daily inspection and maintenance of self-contained breathing apparatus.
 - 05.08 Given each type of self-contained breathing apparatus, demonstrate the correct procedure for recharging.
 - 05.09 Demonstrate the following emergency techniques using self-contained breathing apparatus to: (a) assist other fire fighters; (b) conserve air; (c) show restriction in use of bypass valves.

06.0 DEMONSTRATE KNOWLEDGE OF FIRE APPARATUS--The student will be able to:

- 06.01 Identify the function of a fire company.
- 06.02 Describe the functions of the following units: (a) pumper company; (b) aerial company; (c) rural company; (d) a crash fire rescue unit; (e) elevated platform.
- 06.03 Describe crash-fire-rescue and its uses.
- 06.04 Identify special equipment used in the following apparatus: (a) rescue; (b) chemical; (c) floodlight and power; (d) air truck.

07.0 USE FORCIBLE ENTRY EQUIPMENT--The student will be able to:

- 07.01 Identify and demonstrate the use of each type of manual forcible entry tool.
- 07.02 Identify the method and procedure of properly cleaning, maintaining, and inspecting each type of forcible entry tool and equipment.
- 07.03 Identify materials and construction features of doors, windows, roofs, floors, and vertical barriers and define the dangers associated with each in an emergency situation.
- 07.04 Identify the method and technique of forcible entry through any door, window, ceiling, roof, floor, or vertical barrier.

08.0 DEMONSTRATE VENTILATION PRACTICES--The student will be able to:

- 08.01 Define the principles of ventilation, and identify the advantages and effects of ventilation.
- 08.02 Identify the dangers present and precautions to be taken in performing ventilation.
- 08.03 Demonstrate opening various types of windows from inside and outside, with and without the use of fire department tools.
- 08.04 Demonstrate breaking window or door glass and removing obstruction.
- 08.05 Demonstrate the ventilation of a roof and a floor using an axe.
- 08.06 Define the theory of a "back draft explosion."
- 08.07 Describe the use of different types of power saws and jack hammers.
- 08.08 Identify the different types of roofs, demonstrate the techniques used to ventilate each type, and identify the necessary precautions.
- 08.09 Identify the size and location of an opening for ventilation, and the precautions to be taken during ventilation.
- 08.10 Demonstrate the removal of skylights; scuttle covers, and other covers on roof tops.
- 08.11 Demonstrate types of equipment used for forced ventilation.
- 08.12 Demonstrate ventilation using water fog.

09.0 USE ROPES, TOOLS, AND EQUIPMENT--The student will be able to:

- 09.01 Given the name, picture, or actual know, identify it and describe the purpose for which it would be used.

- 09.02 Identify the construction characteristics and appropriate uses of natural and synthetic ropes.
- 09.03 When given the proper size and amount of rope, demonstrate tying a bowline knot, a clove hitch, rescue knot, figure of eight knot, a becket or sheet bend, and an overhand safety knot.
- 09.04 When given the proper rope, demonstrate the bight, loop, round turn, and half hitch as used in tying knots and hitches.
- 09.05 Using an approved know, hoist any selected forcible entry tool, ground ladder, or appliance to a height of at least 20 feet (6m).
- 09.06 Demonstrate the techniques of inspecting, cleaning, maintaining, and storing rope.
- 09.07 When given a simulated fire fighting or rescue task, select the appropriate size; strength; and length of rope for the task.
- 09.08 Select and tie a rope between two objects at least 15 ft. (4.6m) apart that will support the weight of a fire fighter on the rope.
- 09.09 Use a rope to tie ladders, hose, and other equipment so as to secure them to immovable objects.
- 09.10 Given the name and picture of or actual tool, identify it and demonstrate the use, care, and maintenance.

10.0 DEMONSTRATE RESCUE PROCEDURES--The student will be able to:

- 10.01 Demonstrate the removal of injured persons from the immediate hazard by the use of carries, drags, and stretchers.
- 10.02 Demonstrate searching for victims in burning, smoke-filled buildings, or other hostile environments.
- 10.03 Define the uses of a life belt.
- 10.04 Define safety procedures as they apply to rescue.
- 10.05 Demonstrate the techniques of removing debris, rubble, and other materials.
- 10.06 Define the use of the following rescue tools: (a) shoring blocks; (b) trench jacks; (c) block-and-tackle; (d) hydraulic devices; (e) pneumatic devices.
- 10.07 Demonstrate the techniques of preparing a victim for emergency transportation by using standard available equipment, or by improvising a method.
- 10.08 Identify the dangers of search-and-rescue missions in tunnels, caves, construction sites, and other hazardous areas.
- 10.09 Operating as a member of a team, demonstrate the extrication of a victim from a vehicle accident.
- 10.10 Tie a standard rescue knot on a victim and lower a person from a third-floor level.
- 10.11 Identify safety procedures used during elevator rescue operations.

11.0 DEMONSTRATE SAFETY PROCEDURES--The student will be able to:

- 11.01 Identify dangerous building conditions created by fire.
- 11.02 Demonstrate techniques for action when trapped or disoriented in a fire situation or a hostile environment.
- 11.03 Define procedures to be used in electrical emergencies.

- 11.04 Define fire service lighting equipment.
- 11.05 Identify safety procedures when using fire service lighting equipment.
- 11.06 Demonstrate use of portable power plants, lights, cords, and connectors.
- 11.07 Demonstrate the service and maintenance of portable power plants and lighting equipment.
- 11.08 Define safety procedures as they apply to emergency operations. The specific areas to be defined are: (a) protective equipment; (b) team concept; (c) portable tools and equipment; (d) riding an apparatus; (e) hazardous materials incidents.

12.0 USE LADDERS--The student will be able to:

- 12.01 Identify each type of ladder and define its use.
- 12.02 Operating as an individual and as a member of a team, demonstrate the following ladder carries: (a) one person carry; (b) two person carry; (c) three person carry; (d) four person carry; (e) five person carry; (f) six person carry.
- 12.03 Operating as an individual and as a member of a team, raise each type of size of ground ladder using several different raises for each ladder.
- 12.04 Climb the full length of every type of ground and aerial ladder.
- 12.05 Climb the full length of each type of ground and aerial ladder carrying fire fighting tools or equipment while ascending and descending.
- 12.06 Climb the full length of each type of ground and aerial ladder and bring an "injured person" down the ladders.
- 12.07 Demonstrate the techniques of working from ground or aerial ladders with tools and appliances, with and without a life belt.
- 12.08 Demonstrate the techniques of cleaning ladders.
- 12.09 Identify the materials used in ladder construction.
- 12.10 Identify the load safety features of all ground and aerial ladders.
- 12.11 Demonstrate inspection and maintenance techniques for different types of ground and aerial ladders.

13.0 USE FIRE HOSE, NOZZLES, AND APPLIANCES--The student will be able to:

- 13.01 Identify the sizes, types, amounts, and use of hose carried on a pumper.
- 13.02 Demonstrate the use of nozzles, hose adaptors, and hose appliances carried on a pumper.
- 13.03 When given the necessary equipment and operating as an individual and as a member of a team, advance dry hose lines of two different sizes, both of which shall be 1 1/2 inch or larger, from a pumper: (a) into a structure; (b) up a ladder into an upper floor window; (c) up an inside stairway to an upper floor; (d) up an outside stairway to an upper floor; (e) down an inside stairway to a lower floor; (f) down an outside stairway to a lower floor; (g) to an upper floor by hoisting.

- 13.04 When given the necessary equipment and operating as a member of a team, advance charged attack lines of two different sizes, both which shall be 1 1/2 inch or larger, from a pumper: (a) into a structure; (b) up a ladder into an upper floor window; (c) up an outside stairway to an upper floor; (d) up an inside stairway to an upper floor; (e) down an inside stairway to a lower floor; (f) down an outside stairway to a lower floor; (g) to an upper floor by hoisting.
- 13.05 Demonstrate the techniques for cleaning fire hose, couplings, and nozzles; and inspecting for damage.
- 13.06 Connect a fire hose to a hydrant, and fully open and close the hydrant.
- 13.07 Demonstrate the loading of fire hose on a fire apparatus and identify the purpose of at least three types of hose loads and finishes.
- 13.08 Demonstrate three types of hose rolls.
- 13.09 Demonstrate two types of hose carries.
- 13.10 Demonstrate coupling and uncoupling fire hose.
- 13.11 Work from a ladder with a charged attack line, which shall be 1 1/2 inch or larger.
- 13.12 Demonstrate the techniques of carrying hose into a building to be connected to a standpipe, and of advancing a hose line from a standpipe.
- 13.13 Demonstrate the methods for extending a hose line.
- 13.14 Demonstrate replacing a burst section of hose line.
- 13.15 Identify, select, and demonstrate the use of any nozzle.
- 13.16 Demonstate all hand hose lays.
- 13.17 Demonstrate inspection and maintenance of fire hose, couplings, and nozzles, and recommend replacement or repair as needed.
- 13.18 Demonstrate all hydrant to pumper hose connections.
- 13.19 Select adapters and appliances to be used in a specific fire ground situation.

14.0 USE FIRE STREAMS--The student will be able to:

- 14.01 Define a fire stream.
- 14.02 Manipulate a nozzle so as to attack a Class A fire and a Class B fire.
- 14.03 Define water hammer and at least one methods for its prevention.
- 14.04 Demonstrate how to open and close a nozzle.
- 14.05 Define the following methods of water application: (a) direct; (b) indirect; (c) combination.
- 14.06 Given fire situations, select the proper nozzle and hose size for each.
- 14.07 Identify characteristics of all types of fire streams.
- 14.08 Identify precautions to be followed while advancing hose lines to a fire.
- 14.09 Identify three conditions that result in pressure losses in a hose line.
- 14.10 Identify four special stream nozzles and demonstrate at least two uses or applications for each.
- 14.11 Identify and define foam making appliances and demonstrate a foam stream from each.

- 14.12 Identify three observable results that are obtained when the proper application of a fire stream is accomplished.
- 14.13 Identify and define those items required to develop three types of fire streams and demonstrate each.

15.0 USE WATER SUPPLIES--The student will be able to:

- 15.01 Identify the water distribution system, and other water sources in the local community.
- 15.02 Identify the following parts of a water distribution system: (a) distributors, (b) primary feeders, (c) secondary feeders.
- 15.03 Identify a: (a) dry-barrel hydrant, (b) wet-barrel hydrant.
- 15.04 Identify the following: (a) normal operating pressure of a water distribution system, (b) residual pressure of a water distribution system, (c) flow pressure from an opening that is flowing water.
- 15.05 Identify the following types of main water valves: (a) indicating, (b) nonindicating, (c) post indicator, (d) outside screw and yoke.
- 15.06 Identify hydrant usability by: (a) obstructions to use of hydrant, (b) direction of hydrant outlets to suitability of use, (c) mechanical aboveground damage, (d) condition of paint for rust and corrosion, (e) the flow by fully opening the drain, (f) ability to drain.
- 15.07 Define a tanker shuttle.
- 15.08 Identify the apparatus, equipment, and appliances required to provide water at rural locations by relay pumping, large diameter hose, or a tanker shuttle.
- 15.09 Demonstrate deployment of a portable water tank.

16.0 USE SPRINKLER SYSTEMS--The student will be able to:

- 16.01 Identify a fire department sprinkler connection and water motor alarm.
- 16.02 Connect hose line(s) to a fire department connection of a sprinkler or standpipe system.
- 16.03 Define how the automatic sprinkler heads open and release water.
- 16.04 Temporarily stop the flow of water from a sprinkler head.
- 16.05 Identify the "Main Drain" valve on an automatic sprinkler system.
- 16.06 Open and close a "Main Drain" valve on an automatic sprinkler system.
- 16.07 Identify the "Main Control" valve on an automatic sprinkler system.
- 16.08 Operate a "Main Control" valve on an automatic sprinkler system from "open" to "closed" and then back to "open".
- 16.09 Define the value of automatic sprinklers in providing safety to the occupants in a structure.
- 16.10 Identify and define the dangers of premature closure of sprinkler "Main Control" valve, and of using hydrants to supply hose streams when the same water system is supplying the automatic sprinkler system.

- 16.11 Identify the difference between an automatic sprinkler system that affords complete coverage and a partial sprinkler system.
- 16.12 Identify at least three sources of water for supply to an automatic sprinkler system.
- 16.13 Identify the following: (a) wet sprinkler system; (b) dry sprinkler system; (c) deluge sprinkler system; (d) residential sprinkler system.
- 16.14 Demonstrate removing one head from a sprinkler system and replacing it with a head of the same type.

17.0 DEMONSTRATE SALVAGE PROCEDURES--The student will be able to:

- 17.01 Identify the purpose of salvage and its value to the public and the fire department.
- 17.02 Demonstrate folds and rolls of salvage covers as an individual and as a member of a team.
- 17.03 Demonstrate salvage cover throws as an individual and as a member of a team.
- 17.04 Demonstrate the techniques of inspection, cleaning, and maintaining salvage equipment.
- 17.05 When given salvage equipment, demonstrate the construction and use of a water chute operating as an individual and as a member of a team.
- 17.06 When given salvage equipment, demonstrate the construction and use of a water catch-all operating as an individual and as a member of a team.
- 17.07 When given salvage equipment except salvage covers, demonstrate the removal of debris, and removal and routing of water from a structure.
- 17.08 Demonstrate the covering or closing of openings made during fire fighting operations.

18.0 DEMONSTRATE OVERHAUL PROCEDURES--The student will be able to:

- 18.01 Demonstrate searching for hidden fires.
- 18.02 Demonstrate exposure of hidden fires by opening ceilings, walls, floors, and pulling apart burned materials.
- 18.03 Demonstrate how to separate and remove charred material from unburned material.
- 18.04 Define duties of fire fighters left at the fire scene for fire and security surveillance.
- 18.05 Identify the purpose of overhaul.
- 18.06 List the procedures to follow during overhaul.
- 18.07 Identify the safety precautions necessary during overhaul.

19.0 FOLLOW FIRE PREVENTION INSPECTION PRACTICES--The student will be able to:

- 19.01 Identify the common causes of fires and their prevention.
- 19.02 Identify the fire inspection procedures.
- 19.03 Define the importance of public relations relative to the inspection programs.
- 19.04 Define dwelling inspection procedures.

- 19.05 Prepare diagrams or sketches of buildings to record the locations of items of concern during pre-fire planning operations.
 - 19.06 Collect and record in writing information required for the purpose of preparing a report on a building inspection or survey.
 - 19.07 Identify school exit drill procedures.
 - 19.08 Identify life safety programs for the home.
 - 19.09 Identify common fire hazards and make recommendations for their correction.
- 20.0 DEMONSTRATE KNOWLEDGE OF THE FUNDAMENTALS OF EXTINGUISHMENT--The student will be able to:
- 20.01 Define the fundamental steps in the process of fire extinguishment.
 - 20.02 Identify the considerations involved with various types of structural fires.
 - 20.03 List the sequence of activities involved with various amounts of fire within a structure.
 - 20.04 Identify the elements of ground cover fire.
 - 20.05 Demonstrate a knowledge of flammable liquids and gases.
 - 20.06 Identify the fire fighting techniques employed in combating flammable liquid and gases.
- 21.0 FOLLOW HEALTH AND HUMAN RELATIONS PRACTICES--The student will be able to:
- 21.01 Apply infection control measures in accordance with Centers for Disease Control (CDC) guidelines.
 - 21.02 Recognize and report signs of abuse and neglect.
- 22.0 PROVIDE EMERGENCY MEDICAL CARE--The student will be able to:
- 22.01 Identify a primary survey for life-threatening injuries.
 - 22.02 Identify procedures for determining whether or not a victim has an open airway.
 - 22.03 Identify procedures for establishing an open airway in a nonbreathing person.
 - 22.04 Demonstrate mouth-to-mouth and mouth-to-nose resuscitation.
 - 22.05 Demonstrate oronasal ventilation.
 - 22.06 Identify the three signs of cardiac arrest.
 - 22.07 Demonstrate cardiopulmonary resuscitation.
 - 22.08 Identify three types of external bleeding and the characteristics of each type.
 - 22.09 Demonstrate techniques for controlling external bleeding.
 - 22.10 Identify four sources from which information might be gathered pertaining to the nature of an accident victim's injuries.
 - 22.11 When given specific situations, identify what injuries might be in addition to those injuries that are obvious.
 - 22.12 When given a victim, conduct a secondary survey for other than life-threatening injuries.
 - 22.13 Identify the signs and symptoms of internal bleeding.

- 22.14 Demonstrate the emergency care for a person with known or suspected internal bleeding.
- 22.15 Identify characteristics and emergency medical care of thermal burns according to severity.
- 22.16 When given a specific situation, demonstrate and define the sequential emergency medical care indicated.
- 22.17 Identify the emergency medical care for chemical burns, including chemical burns of the eyes.
- 22.18 Define the types of fractures and describe the differences.
- 22.19 Identify three general signs and symptoms of fractures.
- 22.20 When given an identified fracture, demonstrate the emergency medical care necessary to transport the victim.
- 22.21 Identify the anatomical process of breathing.
- 22.22 Identify the heart-lung-brain relationship as it affects life and define what occurs when an airway obstruction is not corrected.
- 22.23 Demonstrate cardiopulmonary resuscitation employing the two-person technique.
- 22.24 Identify symptoms and demonstrate emergency medical care of traumatic shock.
- 22.25 Demonstrate the use of breathing aid equipment.
- 23.0 PARTICIPATE IN A PHYSICAL FITNESS PROGRAM--The student will be able to:
 - 23.01 Exercise each morning during training.
 - 23.02 Participate in physical fitness exercises during training for a total of eight hours.
- 24.0 PARTICIPATE IN FIRE TRAINING EXAMINATIONS--The student will be able to:
 - 24.01 Take a test (written/oral) on each academic portion of the outline.
 - 24.02 Take a performance test on certain portions of the outline.
- 25.0 PARTICIPATE IN CONTROLLED BURNING EXERCISES--The student will be able to:
 - 25.01 Practice exercises in fire control of structure.
 - 25.02 Practice exercises in fire control of flammable liquids.
 - 25.03 Practice exercises in fire control of natural or propane gas.
 - 25.04 Practice exercises in fire control of vehicles.
- 26.0 OBTAIN CERTIFICATION AS A FIRE FIGHTER--The student will be able to:
 - 26.01 Complete the basic fire fighting course.
 - 26.02 Pass the state certification test including practical examination.
 - 26.03 Pass a physical examination based on NFPA 1001.
 - 26.04 Certificate will depend upon a passing score.
- 27.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--The student will be able to:

- 27.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases including HIV infection.
- 27.02 Identify community resources and services available to the victims of sexually transmitted diseases.
- 27.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
- 27.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
- 27.05 Demonstrate knowledge of legal aspects of AIDS, including testing.

28.0 DEMONSTRATE PROFICIENCY IN FIRST RESPONDER TO MEDICAL EMERGENCIES TECHNIQUES--The student will be able to:

- 28.01 Demonstrate understanding of roles and responsibilities of first responder and legal aspects relative to emergency care.
- 28.02 Demonstrate methods for checking vital signs and procedures for complete examinations.
- 28.03 Describe basic mechanics of respiration including maintaining open airway.
- 28.04 Demonstrate basic CPR.
- 28.05 Describe basic mechanics of circulation.
- 28.06 Describe treatment of closed and open injuries.
- 28.07 Demonstrate knowledge of anatomy and physiology of upper and lower extremities.
- 28.08 Demonstrate splinting techniques.
- 28.09 Describe causes, signs, symptoms and emergency care for patients suffering from heart attack, stroke, diabetic coma, grand and petit mal seizures.
- 28.10 Describe emergency treatment of skull, spine and chest injuries.
- 28.11 List causes, signs and symptoms of poisoning.
- 28.12 Describe procedures for emergency childbirth.
- 28.13 Describe procedures for deciding to move or not to move a patient.
- 28.14 Demonstrate priority levels for performing triage and review of all vital signs.

29.0 DEMONSTRATE PROPER RESPONSE TO HAZARDOUS MATERIALS INCIDENTS--The student will be able to:

- 29.01 List the three parts of the incident management triangle.
- 29.02 Define strategic goals, tactical objectives, and tactical methods.
- 29.03 Identify at least four sources that may help to identify the specific hazardous materials.
- 29.04 List the six primary clues that indicate the presence of hazardous materials.

- 29.06 Define common physical and chemical properties as they related to hazardous materials.
- 29.07 Identify specific types of containers.
- 29.08 Identify four possible types of spills and state their importance in determining the potential course and harm of the incident.
- 29.09 Identify five firefighting considerations and state their importance in determining the potential course and harm of the incident.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8918110
Course Title: Fire Fighting 1
Course Credit: 1

COURSE DESCRIPTION:

This course introduces students to the basic activities and principles of Fire Fighting.

01.0 DEMONSTRATE KNOWLEDGE OF FIRE DEPARTMENT ORGANIZATION AND PROCEDURES--
The student will be able to:

- 01.01 Identify the organization of the fire department.
- 01.02 Identify the size of the fire department, the scope of its operation, and the standard operational procedures.
- 01.03 Identify the fire department rules and regulations that apply to the position of firefighter.
- 01.04 Identify responsibilities of the fire fighter in determining the point of origin, cause, and protection of evidence in fires.
- 01.05 Identify procedures for shutting off the gas services to a building.
- 01.06 Identify procedures for shutting off electrical service to a building.

02.0 USE FIRE ALARMS AND COMMUNICATIONS EQUIPMENT--The student will be able to:

- 02.01 Define the procedure for a citizen to report a fire or other emergency.
- 02.02 Demonstrate receiving an alarm or a report of an emergency, and initiate action.
- 02.03 Define the purpose and function of all alarm-receiving instruments and personnel-alerting equipment in the fire station.
- 02.04 Identify traffic control devices installed in the fire station to facilitate the response of apparatus.
- 02.05 Identify prescribed fire department radio procedures.
- 02.06 Define policy and procedures concerning the ordering and transmitting of multiple alarms of fire and calls for special assistance from the emergency scene.
- 02.07 Identify areas assigned for first-alarm response.
- 02.08 Demonstrate both mobile and portable radio equipment.
- 02.09 Identify fire department radio procedures.
- 02.10 Identify supervisory alarm equipment provided in the fire station and prescribed action to be taken upon receipt of designated signals.

- 02.11 Identify fire location indicators provided to direct fire fighters to specific locations in protected public or private properties.
- 03.0 DEMONSTRATE KNOWLEDGE OF FIRE BEHAVIOR--The student will be able to:
- 03.01 Define fire.
 - 03.02 Define the fire triangle and tetrahedron.
 - 03.03 Identify two chemical, mechanical, and electrical energy heat sources.
 - 03.04 Define the following potential stages of fire: (a) incipient; (b) flame spread; (c) hot smoldering; (d) flash over; (e) steady state; (f) clear burning.
 - 03.05 Define the three methods of heat transfer.
 - 03.06 Define the three physical stages of matter in which fuels are commonly found.
 - 03.07 Define the hazard of finely divided fuels as they relate to the combustion process.
 - 03.08 Define flash point, fire point, and ignition temperature.
 - 03.09 Define concentrations of oxygen in air as it affects combustion.
 - 03.10 Identify three products of combustion commonly found in structural fires which create a life hazard.
 - 03.11 Define the following units of heat measurement: (a) British Thermal Unit (BTU); (b) Fahrenheit (°F); (c) Celsius (°C); (d) Calorie (C).
 - 03.12 Define thermal balance and imbalance.
- 04.0 USE PORTABLE FIRE EXTINGUISHERS--The student will be able to:
- 04.01 Identify the classification of types of fire as they relate to the use of portable extinguishers.
 - 04.02 Given a group of differing extinguishers, identify the appropriate extinguishers for the various classes of fire.
 - 04.03 Define the portable extinguisher rating system.
 - 04.04 Demonstrate the use of portable fire extinguishers for each class of fire.
- 05.0 USE SELF-CONTAINED BREATHING APPARATUS--The student will be able to:
- 05.01 Identify at least four hazardous respiratory environments encountered in fire fighting.
 - 05.02 Demonstrate the use of all types of self-contained breathing apparatus in a dense smoke environment.
 - 05.03 Identify the physical requirements of the wearer, the limitations of the self-contained breathing apparatus, and the safety features of all types of self-contained breathing apparatus.
 - 05.04 Demonstrate donning self-contained breathing apparatus while wearing protective clothing.
 - 05.05 Demonstrate that the self-contained breathing apparatus is in a safe condition for immediate use.
 - 05.06 Identify the procedure for cleaning and sanitizing self-contained breathing apparatus for future use.

- 05.07 Identify the procedure for daily inspection and maintenance of self-contained breathing apparatus.
- 05.08 Given each type of self-contained breathing apparatus, demonstrate the correct procedure for recharging.
- 05.09 Demonstrate the following emergency techniques using self-contained breathing apparatus to: (a) assist other fire fighters; (b) conserve air; (c) show restriction in use of bypass valves.

06.0 DEMONSTRATE KNOWLEDGE OF FIRE APPARATUS--The student will be able to:

- 06.01 Identify the function of a fire company.
- 06.02 Describe the functions of the following units: (a) pumper company; (b) aerial company; (c) rural company; (d) a crash fire rescue unit; (e) elevated platform.
- 06.03 Describe crash-fire-rescue and its uses.
- 06.04 Identify special equipment used in the following apparatus: (a) rescue; (b) chemical; (c) floodlight and power; (d) air truck.

09.0 USE ROPES, TOOLS, AND EQUIPMENT--The student will be able to:

- 09.01 Given the name, picture, or actual know, identify it and describe the purpose for which it would be used.
- 09.02 Identify the construction characteristics and appropriate uses of natural and synthetic ropes.
- 09.03 When given the proper size and amount of rope, demonstrate tying a bowline knot, a clove hitch, rescue knot, figure of eight knot, a becket or sheet bend, and an overhand safety knot.
- 09.04 When given the proper rope, demonstrate the bight, loop, round turn, and half hitch as used in tying knots and hitches.
- 09.05 Using an approved know, hoist any selected forcible entry tool, ground ladder, or appliance to a height of at least 20 feet (6m).
- 09.06 Demonstrate the techniques of inspecting, cleaning, maintaining, and storing rope.
- 09.07 When given a simulated fire fighting or rescue task, select the appropriate size; strength; and length of rope for the task.
- 09.08 Select and tie a rope between two objects at least 15 ft. (4.6m) apart that will support the weight of a fire fighter on the rope.
- 09.09 Use a rope to tie ladders, hose, and other equipment so as to secure them to immovable objects.
- 09.10 Given the name and picture of or actual tool, identify it and demonstrate the use, care, and maintenance.

11.0 DEMONSTRATE SAFETY PROCEDURES--The student will be able to:

- 11.01 Identify dangerous building conditions created by fire.
- 11.02 Demonstrate techniques for action when trapped or disoriented in a fire situation or a hostile environment.
- 11.03 Define procedures to be used in electrical emergencies.
- 11.04 Define fire service lighting equipment.

- 11.05 Identify safety procedures when using fire service lighting equipment.
- 11.06 Demonstrate use of portable power plants, lights, cords, and connectors.
- 11.07 Demonstrate the service and maintenance of portable power plants and lighting equipment.
- 11.08 Define safety procedures as they apply to emergency operations. The specific areas to be defined are: (a) protective equipment; (b) team concept; (c) portable tools and equipment; (d) riding an apparatus; (e) hazardous materials incidents.

12.0 USE LADDERS--The student will be able to:

- 12.01 Identify each type of ladder and define its use.
- 12.02 Operating as an individual and as a member of a team, demonstrate the following ladder carries: (a) one person carry; (b) two person carry; (c) three person carry; (d) four person carry; (e) five person carry; (f) six person carry.
- 12.03 Operating as an individual and as a member of a team, raise each type of size of ground ladder using several different raises for each ladder.
- 12.04 Climb the full length of every type of ground and aerial ladder.
- 12.05 Climb the full length of each type of ground and aerial ladder carrying fire fighting tools or equipment while ascending and descending.
- 12.06 Climb the full length of each type of ground and aerial ladder and bring an "injured person" down the ladders.
- 12.07 Demonstrate the techniques of working from ground or aerial ladders with tools and appliances, with and without a life belt.
- 12.08 Demonstrate the techniques of cleaning ladders.
- 12.09 Identify the materials used in ladder construction.
- 12.10 Identify the load safety features of all ground and aerial ladders.
- 12.11 Demonstrate inspection and maintenance techniques for different types of ground and aerial ladders.

13.0 USE FIRE HOSE, NOZZLES, AND APPLIANCES--The student will be able to:

- 13.01 Identify the sizes, types, amounts, and use of hose carried on a pumper.
- 13.02 Demonstrate the use of nozzles, hose adaptors, and hose appliances carried on a pumper.
- 13.03 When given the necessary equipment and operating as an individual and as a member of a team, advance dry hose lines of two different sizes, both of which shall be 1 1/2 inch or larger, from a pumper: (a) into a structure; (b) up a ladder into an upper floor window; (c) up an inside stairway to an upper floor; (d) up an outside stairway to an upper floor; (e) down an inside stairway to a lower floor; (f) down an outside stairway to a lower floor; (g) to an upper floor by hoisting.
- 13.04 When given the necessary equipment and operating as a member of a team, advance charged attack lines of two different sizes,

- both which shall be 1 1/2 inch or larger, from a pumper: (a) into a structure; (b) up a ladder into an upper floor window; (c) up an outside stairway to an upper floor; (d) up an inside stairway to an upper floor; (e) down an inside stairway to a lower floor; (f) down an outside stairway to a lower floor; (g) to an upper floor by hoisting.
- 13.05 Demonstrate the techniques for cleaning fire hose, couplings, and nozzles; and inspecting for damage.
 - 13.06 Connect a fire hose to a hydrant, and fully open and close the hydrant.
 - 13.07 Demonstrate the loading of fire hose on a fire apparatus and identify the purpose of at least three types of hose loads and finishes.
 - 13.08 Demonstrate three types of hose rolls.
 - 13.09 Demonstrate two types of hose carries.
 - 13.10 Demonstrate coupling and uncoupling fire hose.
 - 13.11 Work from a ladder with a charged attack line, which shall be 1 1/2 inch or larger.
 - 13.12 Demonstrate the techniques of carrying hose into a building to be connected to a standpipe, and of advancing a hose line from a standpipe.
 - 13.13 Demonstrate the methods for extending a hose line.
 - 13.14 Demonstrate replacing a burst section of hose line.
 - 13.15 Identify, select, and demonstrate the use of any nozzle.
 - 13.16 Demonstrate all hand hose lays.
 - 13.17 Demonstrate inspection and maintenance of fire hose, couplings, and nozzles, and recommend replacement or repair as needed.
 - 13.18 Demonstrate all hydrant to pumper hose connections.
 - 13.19 Select adapters and appliances to be used in a specific fire ground situation.

15.0 USE WATER SUPPLIES--The student will be able to:

- 15.01 Identify the water distribution system, and other water sources in the local community.
- 15.02 Identify the following parts of a water distribution system: (a) distributors, (b) primary feeders, (c) secondary feeders.
- 15.03 Identify a: (a) dry-barrel hydrant, (b) wet-barrel hydrant.
- 15.04 Identify the following: (a) normal operating pressure of a water distribution system, (b) residual pressure of a water distribution system, (c) flow pressure from an opening that is flowing water.
- 15.05 Identify the following types of main water valves: (a) indicating, (b) nonindicating, (c) post indicator, (d) outside screw and yoke.
- 15.06 Identify hydrant usability by: (a) obstructions to use of hydrant, (b) direction of hydrant outlets to suitability of use, (c) mechanical aboveground damage, (d) condition of paint for rust and corrosion, (e) the flow by fully opening the drain, (f) ability to drain.
- 15.07 Define a tanker shuttle.
- 15.08 Identify the apparatus, equipment, and appliances required to provide water at rural locations by relay pumping, large diameter hose, or a tanker shuttle.

15.09 Demonstrate deployment of a portable water tank.

17.0 DEMONSTRATE SALVAGE PROCEDURES--The student will be able to:

- 17.01 Identify the purpose of salvage and its value to the public and the fire department.
- 17.02 Demonstrate folds and rolls of salvage covers as an individual and as a member of a team.
- 17.03 Demonstrate salvage cover throws as an individual and as a member of a team.
- 17.04 Demonstrate the techniques of inspection, cleaning, and maintaining salvage equipment.
- 17.05 When given salvage equipment, demonstrate the construction and use of a water chute operating as an individual and as a member of a team.
- 17.06 When given salvage equipment, demonstrate the construction and use of a water catch-all operating as an individual and as a member of a team.
- 17.07 When given salvage equipment except salvage covers, demonstrate the removal of debris, and removal and routing of water from a structure.
- 17.08 Demonstrate the covering or closing of openings made during fire fighting operations.

18.0 DEMONSTRATE OVERHAUL PROCEDURES--The student will be able to:

- 18.01 Demonstrate searching for hidden fires.
- 18.02 Demonstrate exposure of hidden fires by opening ceilings, walls, floors, and pulling apart burned materials.
- 18.03 Demonstrate how to separate and remove charred material from unburned material.
- 18.04 Define duties of fire fighters left at the fire scene for fire and security surveillance.
- 18.05 Identify the purpose of overhaul.
- 18.06 List the procedures to follow during overhaul.
- 18.07 Identify the safety precautions necessary during overhaul.

19.0 FOLLOW FIRE PREVENTION INSPECTION PRACTICES--The student will be able to:

- 19.01 Identify the common causes of fires and their prevention.
- 19.02 Identify the fire inspection procedures.
- 19.03 Define the importance of public relations relative to the inspection programs.
- 19.04 Define dwelling inspection procedures.
- 19.05 Prepare diagrams or sketches of buildings to record the locations of items of concern during pre-fire planning operations.
- 19.06 Collect and record in writing information required for the purpose of preparing a report on a building inspection or survey.
- 19.07 Identify school exit drill procedures.
- 19.08 Identify life safety programs for the home.

- 19.09 Identify common fire hazards and make recommendations for their correction.
- 20.0 DEMONSTRATE KNOWLEDGE OF THE FUNDAMENTALS OF EXTINGUISHMENT--The student will be able to:
- 20.01 Define the fundamental steps in the process of fire extinguishment.
 - 20.02 Identify the considerations involved with various types of structural fires.
 - 20.03 List the sequence of activities involved with various amounts of fire within a structure.
 - 20.04 Identify the elements of ground cover fire.
 - 20.05 Demonstrate a knowledge of flammable liquids and gases.
 - 20.06 Identify the fire fighting techniques employed in combating flammable liquid and gases.
- 21.0 FOLLOW HEALTH AND HUMAN RELATIONS PRACTICES--The student will be able to:
- 21.01 Apply infection control measures in accordance with Centers for Disease Control (CDC) guidelines.
 - 21.02 Recognize and report signs of abuse and neglect.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8918120
Course Title: Fire Fighting 2
Course Credit: 1

COURSE DESCRIPTION:

This course allows the students to develop the basic skills in using fire fighting tools and equipment.

07.0 USE FORCIBLE ENTRY EQUIPMENT--The student will be able to:

- 07.01 Identify and demonstrate the use of each type of manual forcible entry tool.
- 07.02 Identify the method and procedure of properly cleaning, maintaining, and inspecting each type of forcible entry tool and equipment.
- 07.03 Identify materials and construction features of doors, windows, roofs, floors, and vertical barriers and define the dangers associated with each in an emergency situation.
- 07.04 Identify the method and technique of forcible entry through any door, window, ceiling, roof, floor, or vertical barrier.

08.0 DEMONSTRATE VENTILATION PRACTICES--The student will be able to:

- 08.01 Define the principles of ventilation, and identify the advantages and effects of ventilation.
- 08.02 Identify the dangers present and precautions to be taken in performing ventilation.
- 08.03 Demonstrate opening various types of windows from inside and outside, with and without the use of fire department tools.
- 08.04 Demonstrate breaking window or door glass and removing obstruction.
- 08.05 Demonstrate the ventilation of a roof and a floor using an axe.
- 08.06 Define the theory of a "back draft explosion."
- 08.07 Describe the use of different types of power saws and jack hammers.
- 08.08 Identify the different types of roofs, demonstrate the techniques used to ventilate each type, and identify the necessary precautions.
- 08.09 Identify the size and location of an opening for ventilation, and the precautions to be taken during ventilation.
- 08.10 Demonstrate the removal of skylights; scuttle covers, and other covers on roof tops.
- 08.11 Demonstrate types of equipment used for forced ventilation.
- 08.12 Demonstrate ventilation using water fog.

10.0 DEMONSTRATE RESCUE PROCEDURES--The student will be able to:

- 10.01 Demonstrate the removal of injured persons from the immediate hazard by the use of carries, drags, and stretchers.
- 10.02 Demonstrate searching for victims in burning, smoke-filled buildings, or other hostile environments.
- 10.03 Define the uses of a life belt.
- 10.04 Define safety procedures as they apply to rescue.
- 10.05 Demonstrate the techniques of removing debris, rubble, and other materials.
- 10.06 Define the use of the following rescue tools: (a) shoring blocks; (b) trench jacks; (c) block-and-tackle; (d) hydraulic devices; (e) pneumatic devices.
- 10.07 Demonstrate the techniques of preparing a victim for emergency transportation by using standard available equipment, or by improvising a method.
- 10.08 Identify the dangers of search-and-rescue missions in tunnels, caves, construction sites, and other hazardous areas.
- 10.09 Operating as a member of a team, demonstrate the extrication of a victim from a vehicle accident.
- 10.10 Tie a standard rescue knot on a victim and lower a person from a third-floor level.
- 10.11 Identify safety procedures used during elevator rescue operations.

14.0 USE FIRE STREAMS--The student will be able to:

- 14.01 Define a fire stream.
- 14.02 Manipulate a nozzle so as to attack a Class A fire and a Class B fire.
- 14.03 Define water hammer and at least one methods for its prevention.
- 14.04 Demonstrate how to open and close a nozzle.
- 14.05 Define the following methods of water application: (a) direct; (b) indirect; (c) combination.
- 14.06 Given fire situations, select the proper nozzle and hose size for each.
- 14.07 Identify characteristics of all types of fire streams.
- 14.08 Identify precautions to be followed while advancing hose lines to a fire.
- 14.09 Identify three conditions that result in pressure losses in a hose line.
- 14.10 Identify four special stream nozzles and demonstrate at least two uses or applications for each.
- 14.11 Identify and define foam making applicances and demonstrate a foam stream from each.
- 14.12 Identify three observable results that are obtained when the proper application of a fire stream is accomplished.
- 14.13 Identify and define those items required to develop three types of fire streams and demonstrate each.

16.0 USE SPRINKLER SYSTEMS--The student will be able to:

- 16.01 Identify a fire department sprinkler connection and water motor alarm.

- 16.02 Connect hose line(s) to a fire department connection of a sprinkler or standpipe system.
- 16.03 Define how the automatic sprinkler heads open and release water.
- 16.04 Temporarily stop the flow of water from a sprinkler head.
- 16.05 Identify the "Main Drain" valve on an automatic sprinkler system.
- 16.06 Open and close a "Main Drain" valve on an automatic sprinkler system.
- 16.07 Identify the "Main Control" valve on an automatic sprinkler system.
- 16.08 Operate a "Main Control" valve on an automatic sprinkler system from "open" to "closed" and then back to "open".
- 16.09 Define the value of automatic sprinklers in providing safety to the occupants in a structure.
- 16.10 Identify and define the dangers of premature closure of sprinkler "Main Control" valve, and of using hydrants to supply hose streams when the same water system is supplying the automatic sprinkler system.
- 16.11 Identify the difference between an automatic sprinkler system that affords complete coverage and a partial sprinkler system.
- 16.12 Identify at least three sources of water for supply to an automatic sprinkler system.
- 16.13 Identify the following: (a) wet sprinkler system; (b) dry sprinkler system; (c) deluge sprinkler system; (d) residential sprinkler system.
- 16.14 Demonstrate removing one head from a sprinkler system and replacing it with a head of the same type.

22.0 PROVIDE EMERGENCY MEDICAL CARE--The student will be able to:

- 22.01 Identify a primary survey for life-threatening injuries.
- 22.02 Identify procedures for determining whether or not a victim has an open airway.
- 22.03 Identify procedures for establishing an open airway in a nonbreathing person.
- 22.04 Demonstrate mouth-to-mouth and mouth-to-nose resuscitation.
- 22.05 Demonstrate oronasal ventilation.
- 22.06 Identify the three signs of cardiac arrest.
- 22.07 Demonstrate cardiopulmonary resuscitation.
- 22.08 Identify three types of external bleeding and the characteristics of each type.
- 22.09 Demonstrate techniques for controlling external bleeding.
- 22.10 Identify four sources from which information might be gathered pertaining to the nature of an accident victim's injuries.
- 22.11 When given specific situations, identify what injuries might be in addition to those injuries that are obvious.
- 22.12 When given a victim, conduct a secondary survey for other than life-threatening injuries.
- 22.13 Identify the signs and symptoms of internal bleeding.
- 22.14 Demonstrate the emergency care for a person with known or suspected internal bleeding.
- 22.15 Identify characteristics and emergency medical care of thermal burns according to severity.

- 22.16 When given a specific situation, demonstrate and define the sequential emergency medical care indicated.
 - 22.17 Identify the emergency medical care for chemical burns, including chemical burns of the eyes.
 - 22.18 Define the types of fractures and describe the differences.
 - 22.19 Identify three general signs and symptoms of fractures.
 - 22.20 When given an identified fracture, demonstrate the emergency medical care necessary to transport the victim.
 - 22.21 Identify the anatomical process of breathing.
 - 22.22 Identify the heart-lung-brain relationship as it affects life and define what occurs when an airway obstruction is not corrected.
 - 22.23 Demonstrate cardiopulmonary resuscitation employing the two-person technique.
 - 22.24 Identify symptoms and demonstrate emergency medical care of traumatic shock.
 - 22.25 Demonstrate the use of breathing aid equipment.
- 23.0 PARTICIPATE IN A PHYSICAL FITNESS PROGRAM--The student will be able to:
- 23.01 Exercise each morning during training.
 - 23.02 Participate in physical fitness exercises during training for a total of eight hours.
- 24.0 PARTICIPATE IN FIRE TRAINING EXAMINATIONS--The student will be able to:
- 24.01 Take a test (written/oral) on each academic portion of the outline.
 - 24.02 Take a performance test on certain portions of the outline.
- 25.0 PARTICIPATE IN CONTROLLED BURNING EXERCISES--The student will be able to:
- 25.01 Practice exercises in fire control of structure.
 - 25.02 Practice exercises in fire control of flammable liquids.
 - 25.03 Practice exercises in fire control of natural or propane gas.
 - 25.04 Practice exercises in fire control of vehicles.
- 26.0 OBTAIN CERTIFICATION AS A FIRE FIGHTER--The student will be able to:
- 26.01 Complete the basic fire fighting course.
 - 26.02 Pass the state certification test including practical examination.
 - 26.03 Pass a physical examination based on NFPA 1001.
 - 26.04 Certificate will depend upon a passing score.
- 27.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--The student will be able to:
- 27.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases including HIV infection.
 - 27.02 Identify community resources and services available to the victims of sexually transmitted diseases.

- 27.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
- 27.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
- 27.05 Demonstrate knowledge of legal aspects of AIDS, including testing.

28.0 DEMONSTRATE PROFICIENCY IN FIRST RESPONDER TO MEDICAL EMERGENCIES TECHNIQUES--The student will be able to:

- 28.01 Demonstrate understanding of roles and responsibilities of first responder and legal aspects relative to emergency care.
- 28.02 Demonstrate methods for checking vital signs and procedures for complete examinations.
- 28.03 Describe basic mechanics of respiration including maintaining open airway.
- 28.04 Demonstrate basic CPR.
- 28.05 Describe basic mechanics of circulation.
- 28.06 Describe treatment of closed and open injuries.
- 28.07 Demonstrate knowledge of anatomy and physiology of upper and lower extremities.
- 28.08 Demonstrate splinting techniques.
- 28.09 Describe causes, signs, symptoms and emergency care for patients suffering from heart attack, stroke, diabetic coma, grand and petit mal seizures.
- 28.10 Describe emergency treatment of skull, spine and chest injuries.
- 28.11 List causes, signs and symptoms of poisoning.
- 28.12 Describe procedures for emergency childbirth.
- 28.13 Describe procedures for deciding to move or not to move a patient.
- 28.14 Demonstrate priority levels for performing triage and review of all vital signs.

29.0 DEMONSTRATE PROPER RESPONSE TO HAZARDOUS MATERIALS INCIDENTS--The student will be able to:

- 29.01 List the three parts of the incident management triangle.
- 29.02 Define strategic goals, tactical objectives, and tactical methods.
- 29.03 Identify at least four sources that may help to identify the specific hazardous materials.
- 29.04 List the six primary clues that indicate the presence of hazardous materials.
- 29.05 Identify the three components of a hazardous materials incident.
- 29.06 Define common physical and chemical properties as they related to hazardous materials.
- 29.07 Identify specific types of containers.

- 29.08 Identify four possible types of spills and state their importance in determining the potential course and harm of the incident.
- 29.09 Identify five firefighting considerations and state their importance in determining the potential course and harm of the incident.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Fire Science Technology
Occupational Area: Public Service Occupations

PSV

CIP Number 0743.020100
Grade Level College Credits
Length AS Degree/60 Hours

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as fire science technicians, fire officers, or fire safety inspectors, fire assistants (169.167-022), safety inspectors (168.167-078), building inspectors, fire insurance (10243823), fire fighters (70100401), fire inspectors (70100402), fire officers (industry title) or to provide supplemental training for persons previously or currently employed in these occupations.

This program does not prepare students for certification as fire fighters. A student must successfully complete the 280 hour Basic Recruit Program in fire fighting to become certified, pursuant to Chapter 633.34 and 633.35, Florida Statutes.

Student Performance Standards in this program have been adapted from the National Fire Protection Association Fire Fighter Professional Qualifications (NFPA 1001), Fire Officer Professional Qualifications (NFPA 1021), Professional Qualifications for Fire Inspector (NFPA 1031), and Fire Service Instructor Professional Qualifications (NFPA 1041).

The content includes, but is not limited to, fire protection, fire suppression, fire prevention, fire protection systems, firefighting tactics and strategy, building construction, methods of instruction, hazardous materials, fire hydraulics and equipment, insurance adjusting, supervision and leadership, management, health and safety, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities are an integral part of this program.

The Rules of the State Fire Marshal Chapter 4A-37, Standards and Training, state:

In demonstrations involving the use of equipment and performance of tasks under nonhazardous conditions, whether in the classroom or the field, there shall be no less than one certified instructor for each ten students participating in the demonstrations.

In field work involving the handling of equipment and performance of tasks under conditions considered hazardous, there shall be no less than one certified instructor for each six students, but in no case shall there be less than two certified instructors on the scene. The instructors shall be placed to oversee the safety and effectiveness of the training.

- III. **SPECIAL NOTE:** In some instances, it may be necessary for selected instructors to be certified by the Bureau of Fire Standards and Training to teach specific courses.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Demonstrate knowledge of fire department organization and procedures.
- 02.0 Use fire alarms and communications equipment.
- 03.0 Demonstrate knowledge of fire behavior.
- 04.0 Demonstrate knowledge of fire apparatus.
- 05.0 Demonstrate knowledge of the strategies of fire control.
- 06.0 Use portable and fixed fire extinguishers.
- 07.0 Discuss forcible entry and salvage.
- 08.0 Discuss protective breathing apparatus.
- 09.0 Demonstrate knowledge of fire hoses, nozzles, appliances, and ladders.
- 10.0 Demonstrate knowledge of fire streams.
- 11.0 Discuss ventilation and overhaul.
- 12.0 Use sprinkler systems.
- 13.0 Demonstrate safety procedures.
- 14.0 Follow health and human relations practices.
- 15.0 Follow fire prevention inspection practices.
- 16.0 Follow principles of effective supervision and leadership.
- 17.0 Explain importance of community relations.
- 18.0 Identify fire protection organizations.
- 19.0 Evaluate fire hazards.
- 20.0 Apply codes and ordinances.

- 21.0 Use fire fighting tactics and strategy.
- 22.0 Demonstrate knowledge of chemical concepts.
- 23.0 Conduct fire investigations.
- 24.0 Write reports.
- 25.0 Use fire company managerial concepts and principles.
- 26.0 Demonstrate knowledge of hazardous materials.
- 27.0 Demonstrate knowledge of standpipe and hose systems and water supply systems.
- 28.0 Demonstrate knowledge of heat, smoke, and flame detection systems.
- 29.0 Demonstrate knowledge of fire alarm systems and devices.
- 30.0 Demonstrate knowledge of heating and cooking equipment.
- 31.0 Demonstrate knowledge of electricity.
- 32.0 Demonstrate knowledge of general fire safety.
- 33.0 Demonstrate knowledge of fire protection and life safety aspects of building construction.
- 34.0 Demonstrate knowledge and skills related to classroom instruction, evaluation, and management.
- 35.0 Participate in fire training examinations.
- 36.0 Demonstrate employability skills.
- 37.0 Demonstrate knowledge of sexually transmitted diseases, including AIDS.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Fire Science Technology
Secondary Number:
Postsecondary Number: 0743.020100

01.0 DEMONSTRATE KNOWLEDGE OF FIRE DEPARTMENT ORGANIZATION AND PROCEDURES--
The student will be able to:

- 01.01 Identify the organization of the fire department.
- 01.02 Identify the size of the fire department, the scope of its operation, and the standard operational procedures.
- 01.03 Identify the fire department rules and regulations that apply to the position of firefighter.
- 01.04 Identify responsibilities of the fire fighter in determining the point of origin, cause, and protection of evidence in fires.
- 01.05 Identify the components of the fire suppression organization in the authority having jurisdiction.
- 01.06 Define the authority and responsibility of each component of the fire suppression organization in the authority having jurisdiction.
- 01.07 Describe the lines of authority within the department.
- 01.08 Describe the duties and responsibilities of each rank in both line and staff functions.
- 01.09 Describe the chain of command of the fireground organization in the authority having jurisdiction.

02.0 USE FIRE ALARMS AND COMMUNICATIONS EQUIPMENT--The student will be able to:

- 02.01 Define the procedure for a citizen to report a fire or other emergency.
- 02.02 Demonstrate receiving an alarm or a report of an emergency, and initiate action.
- 02.03 Define the purpose and function of all alarm-receiving instruments and personnel-alerting equipment in the fire station.
- 02.04 Identify traffic control devices installed in the fire station to facilitate the response of apparatus.
- 02.05 Identify prescribed fire department radio procedures.
- 02.06 Demonstrate use of both mobile and portable radio equipment.
- 02.07 Define policy and procedures concerning the ordering and transmitting of multiple alarms of fire and calls for special assistance from the emergency scene.
- 02.08 Identify areas assigned for first-alarm response.
- 02.09 Identify supervisory alarm equipment provided in the fire station and prescribed action to be taken upon receipt of designated signals.
- 02.10 Identify fire location indicators provided to direct fire fighters to specific locations in protected public or private properties.

- 02.11 Identify procedures required for receipt and processing of business and personal telephone calls.
- 03.0 DEMONSTRATE KNOWLEDGE OF FIRE BEHAVIOR--The student will be able to:
- 03.01 Define the terms fire, flashover, and flameover.
 - 03.02 Define the fire triangle and tetrahedron.
 - 03.03 Identify two chemical, mechanical, and electrical energy heat sources.
 - 03.04 Define the following potential stages of fire: (a) incipient; (b) flame spread; (c) hot smoldering; (d) flash over; (e) steady state; (f) clear burning.
 - 03.05 Define the three methods of heat transfer.
 - 03.06 Define the three physical stages of matter in which fuels are commonly found.
 - 03.07 Define the hazard of finely divided fuels as they relate to the combustion process.
 - 03.08 Define the terms flash point, fire point, and ignition temperature.
 - 03.09 Define concentrations of oxygen in air as it affects combustion.
 - 03.10 Identify three products of combustion commonly found in structural fires which create a life hazard.
 - 03.11 Define the following units of heat measurement: (a) British Thermal Unit (BTU); (b) Fahrenheit (°F); (c) Celsius (°C); (d) Calorie (Cal); (e) Kilowatt (kw); (f) British Thermal Units/second (BTU/s); (g) Watt (w); (h) Megawatt (mw); (i) Joule (j).
 - 03.12 Define the terms thermal balance and imbalance.
- 04.0 DEMONSTRATE KNOWLEDGE OF FIRE APPARATUS--The student will be able to:
- 04.01 Identify the function of a fire company.
 - 04.02 Describe the functions of the following units: (a) pumper company; (b) aerial company; (c) rural company; (d) a crash fire rescue unit; (e) elevated platform.
 - 04.03 Describe crash-fire-rescue and its uses.
 - 04.04 Identify special equipment used in the following apparatus: (a) rescue; (b) chemical; (c) floodlight and power; (d) air truck.
 - 04.05 Identify formulas necessary for fire ground calculations for fire flow and water supply needed.
 - 04.06 Identify, describe, operate, have the knowledge of the care and maintenance of the various types of firefighting apparatus in use and fire service.
- 05.0 DEMONSTRATE KNOWLEDGE OF THE STRATEGIES OF FIRE CONTROL--The student will be able to:
- 05.01 Define the firefighting strategy necessary for fire control in structures.
 - 05.02 Define the firefighting strategy necessary for fire control in flammable liquids.

- 05.03 Define the firefighting strategy necessary for fire control in liquified petroleum or natural gas.
- 05.04 Define the firefighting strategy necessary for fire control in vehicles.
- 06.0 USE PORTABLE AND FIXED FIRE EXTINGUISHERS--The student will be able to:
 - 06.01 Identify the classification of types of fire as they relate to the use of portable extinguishers.
 - 06.02 Given a group of differing extinguishers, identify the appropriate extinguishers for the various classes of fire.
 - 06.03 Define the portable extinguisher rating system.
 - 06.04 Identify the types of portable fire extinguishers.
 - 06.05 Demonstrate the use of portable fire extinguishers for each class of fire.
 - 06.06 Describe three safety checks to perform on portable extinguishers (to include charge, hose, and nozzle inspection).
 - 06.07 Identify how to evaluate the operational readiness of portable fire extinguishers.
 - 06.08 Identify the capability of extinguishing agents and the proper method of agent application.
 - 06.09 Identify code requirements and regulations relative to the distribution and location of portable fire extinguishers.
 - 06.10 Identify portable fire extinguisher maintenance requirements and procedures.
 - 06.11 Identify fixed fire extinguishing systems.
 - 06.12 Identify how to evaluate the operational readiness of fixed fire extinguishing systems.
 - 06.13 Identify the capabilities of the extinguishing agent and the proper procedures for agent application in a fixed fire extinguishing system.
- 07.0 DISCUSS FORCIBLE ENTRY AND SALVAGE--The student will be able to:
 - 07.01 Identify procedures for forcible entry.
 - 07.02 Identify conditions that may hamper fire department access to a building or premises in event of fire or other emergency.
 - 07.03 Identify the purpose of salvage and its value to the public and the fire department.
 - 07.04 Identify locations in buildings, objects, etc., that require special protection during salvage operations.
- 08.0 DISCUSS PROTECTIVE BREATHING APPARATUS--The student will be able to:
 - 08.01 Identify four hazardous respiratory environments encountered during fire emergencies.
 - 08.02 Identify the use, limitations, and safety features of protective breathing apparatus.
- 09.0 DEMONSTRATE KNOWLEDGE OF FIRE HOSES, NOZZLES, APPLIANCES, AND LADDERS--The student will be able to:
 - 09.01 Identify the sizes, types, amounts, and use of hose carried on a pumper.

- 09.02 Identify the use of nozzles, hose adapters, and hose appliances.
 - 09.03 Connect a fire hose to a hydrant, and fully open and close the hydrant.
 - 09.04 Identify the techniques for coupling and uncoupling fire hose, advancing a hose line from a standpipe, and extending a hose line.
 - 09.05 Identify procedures for inspection and maintenance of fire hose, couplings, and nozzles.
 - 09.06 Identify hydrant-to-pumper hose connections.
 - 09.07 Identify the use and limitations of each type of fire department ladder.
- 10.0 DEMONSTRATE KNOWLEDGE OF FIRE STREAMS--The student will be able to:
- 10.01 Define a fire stream and the following methods of water application: (a) direct; (b) indirect; (c) combination.
 - 10.02 Define water hammer and the methods for its prevention.
- 11.0 DISCUSS VENTILATION AND OVERHAUL--The student will be able to:
- 11.01 Define the principles of ventilation and identify the advantages and effects of ventilation.
 - 11.02 Define the term backdraft explosion.
 - 11.03 Identify the purpose of overhaul.
- 12.0 USE SPRINKLER SYSTEMS--The student will be able to:
- 12.01 Identify the different types of sprinkler systems.
 - 12.02 Identify the following: (a) wet sprinkler system; (b) dry sprinkler system; (c) deluge sprinkler system; (d) residential sprinkler system.
 - 12.03 Identify a fire department sprinkler connection and water motor alarm.
 - 12.04 Connect hose line(s) to a fire department connection of a sprinkler or standpipe system.
 - 12.05 Define how the automatic sprinkler heads open and release water.
 - 12.06 Temporarily stop the flow of water from a sprinkler head.
 - 12.07 Identify the "Main Drain" valve on an automatic sprinkler system.
 - 12.08 Open and close a "Main Drain" valve on an automatic sprinkler system.
 - 12.09 Identify the "Main Control" valve on an automatic sprinkler system.
 - 12.10 Operate a "Main Control" valve on an automatic sprinkler system from "open" to "closed" and then back to "open".
 - 12.11 Define the value of automatic sprinklers in providing safety to the occupants in a structure.
 - 12.12 Identify and define the dangers of premature closure of sprinkler "Main Control" valve, and of using hydrants to supply hose streams when the same water system is supplying the automatic sprinkler system.

- 12.13 Identify the difference between an automatic sprinkler system that affords complete coverage and partial sprinkler system.
- 12.14 Identify at least three sources of water for supply to an automatic sprinkler system.
- 12.15 Demonstrate removing one head from a sprinkler system and replacing it with a head of the same type.
- 12.16 When given an "Alarm Valve" of an automatic sprinkler system, identify the operation of the valve.
- 12.17 When given twelve various sprinkler heads, identify each of them correctly as to: (a) temperature rating, (b) pendant or upright, (c) special types.
- 12.18 Identify the "Alarm Test" valve on an automatic sprinkler system.
- 12.19 When given an automatic sprinkler system, operate the "Alarm Test" valve.
- 12.20 When given a velocity drain valve or ball drip valve on the fire department connection of an automatic sprinkler system, demonstrate that the valve is operating and the pipe drained.
- 12.21 When given a check valve on the fire department connection to an automatic sprinkler system, identify the direction of flow of water through the valve.
- 12.22 Read and record the indicated pressures on all gages provided on a standard wet automatic sprinkler system and identify each gage.
- 12.23 Read and record the indicated pressures on all gages provided on a standard dry pipe automatic sprinkler system and identify each gage.
- 12.24 Define the reliability of automatic sprinkler systems and give eight reasons for unsatisfactory performance.
- 12.25 By inspection of an automatic sprinkler system in a building, identify obstructions to sprinkler heads and the required clearance.

13.0 DEMONSTRATE SAFETY PROCEDURES--The student will be able to:

- 13.01 Identify dangerous building conditions created by fire.
- 13.02 Demonstrate techniques for action when trapped or disoriented in a fire situation or a hostile environment.
- 13.03 Define procedures to be used in electrical emergencies.
- 13.04 Define fire service lighting equipment.
- 13.05 Identify safety procedures when using fire service lighting equipment.
- 13.06 Demonstrate use of portable power plants, lights, cords, and connectors.
- 13.07 Demonstrate the service and maintenance of portable power plants and lighting equipment.
- 13.08 Define safety procedures as they apply to emergency operations. The specific areas to be defined are: (a) protective equipment; (b) team concept; (c) portable tools and equipment; (d) riding an apparatus; (e) hazardous materials incidents.
- 13.09 Identify the most common causes of personal injury to the fire fighter.
- 13.10 Given specific hazards, develop an accident prevention program applicable to the officer's duty assignment.

- 13.11 Given accident and injury reports, evaluate the reports and describe appropriate prevention measures.
 - 13.12 Given rules, regulations, directives, policies and laws regarding safety practices: (a) demonstrate procedures required to enforce the safety regulations, (b) demonstrate how to maintain complete and accurate records.
- 14.0 FOLLOW HEALTH AND HUMAN RELATIONS PRACTICES--The student will be able to:
- 14.01 Apply infection control measures in accordance with Centers for Disease Control (CDC) guidelines.
 - 14.02 Recognize and report signs of abuse and neglect.
- 15.0 FOLLOW FIRE PREVENTION INSPECTION PRACTICES--The student will be able to:
- 15.01 Demonstrate clear oral expression.
 - 15.02 Demonstrate clear written expression.
 - 15.03 Demonstrate through tests, interview, or both, the ability to interact with the public, under conditions of code enforcement or fire prevention duties, with tact, discretion, and without loss of authority.
 - 15.04 Identify the organization of the fire department or the entity for which inspection duties will be performed.
 - 15.05 Identify the applicable organizational rules and regulations.
 - 15.06 Explain the procedures for conducting fire inspections including evaluation of gathered information and report preparation and proper procedure for conducting fire and exit drills in accordance with regulations within the authority having jurisdiction for the following occupancies; (a) assembly, (b) educational, (c) health care, (d) detention and correctional, (e) residential, (f) mercantile, (g) business, (h) industrial, (i) storage, (j) unusual structures, (k) mixed occupancies.
 - 15.07 Identify the leading causes of fire as established by the authority having jurisdiction.
 - 15.08 Identify the leading cause of fire spread as established by the authority having jurisdiction.
 - 15.09 Describe the components and procedures for the development and implementation of a public fire prevention education program.
 - 15.10 Define the importance of public relations relative to the inspection programs.
 - 15.11 Define dwelling inspection procedures.
 - 15.12 Prepare diagrams or sketches of buildings to record the locations of items of concern during pre-fire planning operations.
 - 15.13 Collect and record in writing information required for the purpose of preparing a report on a building inspection or survey.
 - 15.14 Identify school exit drill procedures.
 - 15.15 Identify life safety programs for the home.

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- 15.16 Identify the requirements relative to fire drills that may be required within the jurisdiction.
- 15.17 Identify how to conduct, evaluate, or both, fire drills in various occupancies.
- 15.18 Identify common fire hazards and make recommendations for their correction.
- 15.19 Write a building inspection report.
- 15.20 Demonstrate accepted filing techniques.
- 15.21 Identify that the fire extinguishers in an inspected premise conform to the fire prevention requirement.
- 15.22 Identify the procedures to be used whenever fire hazards, or suspected fire hazards, are encountered during inspections.
- 15.23 Identify the procedure for preparing a pre-fire plan.
- 15.24 Identify the duties and responsibilities of a firefighter assigned to a fire prevention detail in places of public assembly.
- 15.25 Identify the fire exit requirements for different types of occupancies.
- 15.26 Identify the use and operation of various roof vents, both manual and automatic.
- 15.27 Inspect standpipe systems for fire protection, including visual inspection of hose (where provided), nozzles, hose outlet threads, and fire department connections.
- 15.28 Identify a private water system for fire protection, including fire pumps, yard hydrants, hose houses, gravity and pressure types of water storage tanks, reservoirs, and draft sources.
- 15.29 Identify local and state fire codes concerning subjects to be noted in fire company inspections.
- 15.30 Identify the areas of responsibility of other municipal and state inspection agencies.
- 15.31 Identify the fire hazards commonly found in manufacturing, commercial, residential, and public assembly occupancies.
- 15.32 Identify standard types of chimneys and flues, and recognize deficiencies likely to cause fires.
- 15.33 Identify and define fire spread through air conditioning and utility ducts and the functions of automatic and manual controls of these systems.
- 15.34 Identify local code requirements covering the proper storage and use of flammable liquids and gases.
- 15.35 Identify storage codes and practices contributing to fire safety in buildings, including proper piling, aisles, clearances, access to fire equipment and exits.
- 15.36 Identify proper outside storage and how it affects fire fighting, including aisles, roadways, access to hydrants, access to buildings, and exposure hazards.
- 15.37 Identify water and smoke damage potential to goods, to office and manufacturing machinery, and other valuable objects.
- 15.38 Demonstrate the procedures for the inspection of stationary fire pumps according to the authority having jurisdiction.
- 15.39 Identify the special extinguishing systems within the authority having jurisdiction and demonstrate the procedures for the inspection of the systems.

- 15.40 Identify and describe the operating principles of special fixed extinguishing systems, fire detection systems, and special communications systems as defined by the NFPA.
 - 15.41 Define the legally established responsibilities and empowerment related to the performance of the inspector's duties.
 - 15.42 Define the established appeals procedure and judicial review process for the jurisdiction of which the inspector is employed.
 - 15.43 Identify other agencies that may be referred to for assistance in correcting hazards.
 - 15.44 Identify other jurisdictional authorities may be requirements, or conduct inspections, involving life safety or fire protection.
 - 15.45 Initiate corrective procedures for fire hazards discovered during fire inspections.
 - 15.46 Identify how to operate the essential equipment necessary to accomplish code enforcement including, but not limited to, elementary photography equipment and portable flammable and combustible atmosphere detection equipment.
 - 15.47 Identify procedures required for the processing of plans and specifications.
- 16.0 FOLLOW PRINCIPLES OF EFFECTIVE SUPERVISION AND LEADERSHIP--The student will be able to:
- 16.01 Describe the advantages, disadvantages, and effects of various recognized styles of leadership.
 - 16.02 Given a summary of the functions of a leader, (a) describe the officer's responsibility in promoting cooperation, and (b) describe how group cooperation may be obtained.
 - 16.03 Identify the three types of verbal orders and demonstrate their use in each of the following situations: (a) during emergency situations, (b) in the station, (c) during training sessions.
 - 16.04 Given a list of policies which may be used by a department, (a) describe how the various policies affect the officer, (b) describe the officer's role in interpreting the policies, (c) describe why accuracy, clarity, and impartiality are important in interpreting policy, (d) describe how to implement the policies in the leadership role.
 - 16.05 Given the personnel rules of the department, describe how to deal fairly, firmly, and equally with subordinates.
 - 16.06 Recognize the symptoms of employee-related problems in the areas of substance abuse, situational stress, and behavioral change, and indicate the appropriate action according to the policies and procedures established by the authority having jurisdiction.
- 17.0 EXPLAIN IMPORTANCE OF COMMUNITY RELATIONS--The student will be able to:
- 17.01 Describe how each of the following factors affects the behavior of groups within the community in relation to the fire department: (a) economic conditions, (b) religion, (c) race, ethnic, and age factors, (d) community, organizations, (e) family structure.

- 17.02 Explain procedures for handling citizen complaints, inquiries, and concerns.

18.0 IDENTIFY FIRE PROTECTION ORGANIZATIONS--The student will be able to:

- 18.01 Identify the public and private national organizations that support the fire protection services, and describe the functions of each.
- 18.02 Identify the public and private state organizations that support the fire protection services, and describe the functions of each.
- 18.03 Identify the public and private local organizations that support the fire protection services, and describe the functions of each.

19.0 EVALUATE FIRE HAZARDS--The student will be able to:

- 19.01 Describe the fire hazard characteristics of the following materials: (a) class A materials, (b) class B materials, (c) class C materials, (d) class D materials.
- 19.02 Identify the leading causes of fire as established by NFPA.
- 19.03 Identify the leading causes of fire spread as established by NFPA.
- 19.04 Identify the common and special hazards that might be encountered in the following occupancies: (a) assembly, (b) educational, (c) health care, (d) detention and correctional, (e) residential, (f) mercantile, (g) business, (h) industrial, (i) storage, (j) unusual structures, (k) mixed occupancies.
- 19.05 Given a fire inspection report of facilities and areas where flammable liquids are (1) stored, (2) handled, and (3) transported, shall for each given situation; (a) evaluate the reports and identify the hazards that exist, (b) list recommendations to correct the hazards identified.
- 19.06 Given a fire inspection report of facilities and areas where flammable gases are (1) stored, (2) handled, and (3) transported, shall for each situation given: (a) evaluate the reports and identify the hazards that exist, (b) list recommendations to correct the hazards identified.
- 19.07 Given a fire inspection report of facilities and areas where hazardous materials are (1) stored, (2) handled, and (3) transported, shall for each situation given: (a) evaluate the reports and identify the hazards that exist, (b) list recommendations to correct the hazards identified.
- 19.08 Identify and explain the local, national, and international symbols used to designate hazardous materials, and identify the precautions that fire fighters are expected to observe and follow.
- 19.09 Demonstrate knowledge of the color coding required for the various compressed gas cylinders as defined by the American Gas Association.

20.0 APPLY CODES AND ORDINANCES--The student will be able to:

- 20.01 Identify and describe the fire prevention codes, building codes, and ordinances applicable to fire safety in the jurisdiction having authority.
- 20.02 Identify and describe recognized fire prevention codes and building codes.
- 20.03 Identify acceptable code enforcement procedures and sources of information for such procedures.
- 20.04 Identify jurisdictional responsibilities of federal, state, and local governments and organizations relative to code enforcement procedures.
- 20.05 Identify anticipated human behavior relative to code enforcement.
- 20.06 Identify local code enforcement procedures.
- 20.07 Identify the judicial system, particularly as it relates to code enforcement procedures.
- 20.08 Identify legal processes as they relate to code enforcement procedures.
- 20.09 Define the established procedure for modification of code requirements.
- 20.10 Identify recommended courtroom demeanor.
- 20.11 Identify the ethical and legal responsibilities associated with code enforcement procedures.
- 20.12 Identify license or permit requirements within the jurisdiction.
- 20.13 Identify the general procedures for handling complaints.

21.0 USE FIRE FIGHTING TACTICS AND STRATEGY--The student will be able to:

- 21.01 Identify and describe the factors of size-up that must be considered to determine procedures for control of an emergency situation.
- 21.02 Given an emergency incident requiring rescue and a list of available resources, shall demonstrate the utilization and coordination of personnel and equipment to complete the rescue operation.
- 21.03 Given a fire problem that would require the application of recognized principles of overhaul, shall describe or demonstrate the overhaul procedures necessary.
- 21.04 Given a structural fire condition requiring salvage operations, shall describe the salvage operation procedures and techniques necessary.
- 21.05 Given an emergency incident, shall describe how basic organizational principles would be applied.
- 21.06 Given an interior fire situation, shall: (a) evaluate the situation, (b) describe how to control the spread of fire within the building.
- 21.07 Given an exterior fire situation, shall: (a) evaluate the situation, (b) describe how to control the spread of fire to keep it from extending to adjacent buildings.
- 21.08 Describe ventilation procedures.
- 21.09 Given equipment and personnel, demonstrate the attack procedures required to control, confine, and extinguish a fire in each of the following simulated situations: (a) structures, (b)

- flammable liquids, (c) flammable gases, (d) hazardous materials.
- 21.10 Given an emergency incident requiring multiple company operations, analyze the situation and determine the resources required for control and demonstrate the assignment and placement of the resources.
- 21.11 Given a target hazard and all pertinent information, develop a prefire plan that will include the utilization of personnel, equipment, and extinguishing agents.
- 22.0 DEMONSTRATE KNOWLEDGE OF CHEMICAL CONCEPTS--The student will be able to:
- 22.01 Define the following terms and demonstrate how each relates to emergency situations: (a) vapor pressure, (b) vapor density, (c) ignition temperature, (d) flash point, (e) flammable limits, (f) specific gravity, (g) boiling point, (h) reactivity, (i) alkalines, (j) acids, (k) oxidizers.
- 22.02 Explain the following as defined by an accepted authority: atom, molecule, ions, atomic and molecular weights, chemical changes, chemical equilibrium, and acids and bases.
- 23.0 CONDUCT FIRE INVESTIGATIONS--The student will be able to:
- 23.01 Identify the requirements, need, and purpose for fire cause determination and fire investigation.
- 23.02 Given photographs, diagrams, and/or sketches, (a) determine the point of origin, (b) describe the procedure used by the authority having jurisdiction to determine loss to structure and contents.
- 23.03 Given photographs, sketches and/or diagrams where an incendiary fire is suspected, (a) describe how personnel would be directed to identify and preserve evidence, (b) describe how personnel would properly collect, remove, and preserve evidence, (c) describe the procedures for preliminary interviewing of witnesses and identification of suspects at the fire scene.
- 23.04 Identify the factors to be considered upon arrival on the fire scene that may indicate an incendiary fire.
- 23.05 Given an incendiary fire: (a) describe the procedures used in identifying incendiary fires, (b) describe the procedures used in locating evidence to indicate arson intent, (c) demonstrate the methods of securing and controlling the fire scene until appropriate investigative personnel arrive.
- 23.06 Given a summary of the methods most generally used by persons by setting fires, describe how the methods used by arsonists can be detected.
- 23.07 Given a summary of the motives for illegally setting fires, describe how the motives can be used by an investigator to determine a likely suspect.
- 23.08 Identify which local, regional, and/or state agency may assist in fire investigations.
- 23.09 Given a summary of the record system maintained on fire investigations, describe how the record system is used and maintained.

24.0 WRITE REPORTS--The student will be able to:

- 24.01 Identify the types of report forms used by the authority have jurisdiction at that level of responsibility.
- 24.02 Given the report forms and all the pertinent information, complete the reports used by the authority having jurisdiction at that level of responsibility.
- 24.03 Given a recordkeeping system for the officer's area of responsibility, demonstrate: (a) how to maintain the system, (b) how to transmit reports to superior officers.
- 24.04 Demonstrate the ability to complete a narrative report detailing both an emergency and a nonemergency incident.

25.0 USE FIRE COMPANY MANAGERIAL CONCEPTS AND PRINCIPLES--The student will be able to:

- 25.01 Develop a schedule for company: manpower, distribution, equipment maintenance, training and material allocations.
- 25.02 Describe essentials necessary for a good company training session.
- 25.03 Conduct a company training session.
- 25.04 Apply principles and concepts learned to case studies based upon fire company administrative operations.
- 25.05 Write typical company level reports.
- 25.06 Create a budget and payroll for the company.
- 25.07 Describe personnel selection and records.
- 25.08 Write a daily plan of operation.
- 25.09 Describe public relations and how it affects daily operation of a company.
- 25.10 List methods of procuring equipment and supplies.
- 25.11 Describe procedures to follow in maintenance of apparatus and equipment.
- 25.12 Write the procedures used in training of personnel and operations research.
- 25.13 Demonstrate communications, including receipt and transmission of alarms and routine calls.
- 25.14 Discuss fire prevention inspection services and enforcement of fire codes.
- 25.15 Conduct investigations to determine fire causes and factors contributing to the spread of fire, suppression of arson, and studies of fire experience.
- 25.16 Identify the most common causes of personal injury to the firefighter.
- 25.17 Given specific hazards, develop an accident prevention program applicable to the officer's duty assignment.
- 25.18 Given actual or simulated accident and injury reports, evaluate the reports and describe appropriate prevention measures.
- 25.19 Given rules, regulations, directives, policies, and laws regarding safety practices: (a) demonstrate procedures required to enforce the safety regulations, (b) demonstrate how to maintain complete and accurate records.

26.0 DEMONSTRATE KNOWLEDGE OF HAZARDOUS MATERIALS--The student will be able to:

- 26.01 Identify the general properties of flammable and combustible liquids.
- 26.02 Define the basic effects of temperature and pressure on flammable and combustible liquids.
- 26.03 Define flammable and explosive limits.
- 26.04 Define specific gravity.
- 26.05 Define boiling point.
- 26.06 Define the basic classes of flammable and combustible liquids as defined by NFPA 30, Flammable and Combustible Liquids Code.
- 26.07 Identify the fire hazards associated with the storage, handling, and use of flammable and combustible liquids.
- 26.08 Identify the regulations and hazards attendant to the transfer of flammable and combustible liquids.
- 26.09 Identify the regulations and fire hazards attendant to finishing processes that involve flammable and combustible liquids.
- 26.10 Identify what conditions constitute possible sources of ignition during storage, handling, and use of flammable and combustible liquids.
- 26.11 Identify conditions that might be conducive to creating explosive atmospheres in the storage, handling, and use of flammable and combustible liquids.
- 26.12 Identify conditions associated with the typical storage, handling, and use of flammable and combustible liquids that might be conducive to a BLEVE situation.
- 26.13 Identify regulations or code provisions related to the storage, handling, and use of flammable or combustible liquids.
- 26.14 Identify the procedures for investigating flammable or combustible liquid leaks or suspected leaks.
- 26.15 Identify regulations and acceptable installation practices relative to underground storage tanks for flammable and combustible liquids.
- 26.16 Identify venting procedures and devices installed on underground storage tanks for flammable and combustible liquids.
- 26.17 Identify the normal requirements and acceptable installation practices relative to piping and valves attendant to underground storage tanks for flammable and combustible liquids.
- 26.18 Identify the testing methods and requirements for underground storage tanks and piping as specified in NFPA 30, Flammable and Combustible Liquids Code, or other applicable sources.
- 26.19 Identify the regulations and acceptable installation practices relative to inside storage of flammable and combustible liquids.
- 26.20 Identify how to determine whether normal and emergency venting devices are being properly maintained.
- 26.21 Identify drainage, diking systems, or both, that may be required for aboveground storage of flammable and combustible liquids.
- 26.22 Identify requirements for an installation of piping and valves attendant to aboveground storage tanks for flammable and combustible liquids.

- 26.23 Identify the testing methods and requirements for aboveground storage tanks and piping as specified in NFPA 30, Flammable and Combustible Liquids Code, or other applicable sources.
- 26.24 Identify the regulations and acceptable installation practices relative to inside tank storage of flammable and combustible liquids.
- 26.25 Identify how to determine if normal and emergency venting devices are being properly maintained.
- 26.26 Identify drainage or containment systems that may be required for the inside storage of flammable and combustible liquids.
- 26.27 Identify the requirements and acceptable installation practices relative to piping and valves attendant to the inside storage of flammable and combustible liquids.
- 26.28 Identify the regulations or code requirements relative to the outside container storage of flammable and combustible liquids.
- 26.29 Identify acceptable flammable and combustible liquid containers for outside storage.
- 26.30 Identify acceptable locations and storage parameters such as aisle spacing, stacking, storing of containers in vertical or horizontal positions, etc., relative to the outside storage of flammable and combustible liquids.
- 26.31 Identify container venting devices and venting practices.
- 26.32 Identify the regulations, including quantity limitations, that may exist for different occupancies relative to the inside storage of flammable and combustible liquids.
- 26.33 Identify acceptable flammable and combustible liquid containers for inside storage.
- 26.34 Identify storage parameters such as aisle spacing, stacking, storage of containers in vertical or horizontal positions, etc., relative to the inside storage of flammable and combustible liquids.
- 26.35 Identify normal and emergency venting devices or procedures acceptable for the inside storage of flammable and combustible liquids.
- 26.36 Identify techniques for flammable and combustible liquids fire extinguishment.
- 26.37 Identify portable fire extinguisher installation requirements for areas involving flammable and combustible liquids.
- 26.38 Identify fixed fire extinguishing systems required or installed for flammable and combustible liquids storage, handling, and use.
- 26.39 Identify the regulatory labeling and placarding systems used for flammable and combustible liquids identification.
- 26.40 Identify regulations relative to the transportation of flammable and combustible liquids within the jurisdiction.
- 26.41 Identify which agencies regulate the transportation of flammable and combustible liquids within the jurisdiction.
- 26.42 Identify which agencies offer assistance in handling flammable and combustible liquids emergencies in the jurisdiction.
- 26.43 Identify the general properties of compressed and liquefied gases.
- 26.44 Identify the effects of temperature and pressure as they relate to compressed and liquefied gases.

- 26.45 Define specific gravity, particularly as it relates to compressed and liquefied gases.
- 26.46 Identify the difference between compressed and liquefied gases.
- 26.47 Identify the fire hazards associated with the typical storage, handling, and use of compressed and liquefied gases.
- 26.48 Identify possible ignition sources and fire causes involving compressed and liquefied gases.
- 26.49 Identify the conditions that might be conducive to fire initiation and propagation involving compressed and liquefied gases.
- 26.50 Identify the procedure for investigating flammable gas leaks or suspected leaks.
- 26.51 Identify the acceptable installation and storage practices relative to compressed and liquefied gas containers.
- 26.52 Identify the practices and procedures involved in the transfer of compressed and liquefied gases.
- 26.53 Identify methods of compressed and liquefied gases leakage control.
- 26.54 Identify the regulations relative to the transportation of compressed and liquefied gases.
- 26.55 Identify the agencies that regulate the transportation of compressed and liquefied gases.
- 26.56 Identify the agencies that offer assistance in handling compressed and liquefied gases emergencies within the jurisdiction.
- 26.57 Identify fire extinguishment practices and procedures for compressed and liquefied gases emergencies.
- 26.58 Identify portable fire extinguisher installation requirements for areas involving compressed and liquefied gases.
- 26.59 Identify requirements for fixed fire extinguishing systems required for the storage, handling, and use of compressed and liquefied gases.
- 26.60 Identify regulatory labeling and placarding regulations relative to compressed and liquefied gases.
- 26.61 Identify the classifications of explosives. (See NFPA 495, Code for the Manufacture, Transportation, Storage, and Use of Explosive Materials.)
- 26.62 Identify the need for security of explosives.
- 26.63 Identify the regulations relative to the transportation of explosives, including fireworks, within the jurisdiction in which the inspector is employed.
- 26.64 Identify the common hazards associated with the typical storage, handling, and use of explosives, including fireworks.
- 26.65 Identify regulatory labeling and placarding systems relative to explosives, including fireworks.
- 26.66 Identify the sources from which detailed or technical information on explosives, including fireworks, might be obtained.
- 26.67 Identify code requirements and regulations for the storage of explosives, including fireworks.
- 26.68 Identify the type and construction of storage facilities required for the various classes of explosives.
- 26.69 Identify the regulatory labeling and placarding systems for various tyupes and quantities of hazardous materials.

- 26.70 Identify code requirements and regulations for the storage, handling, and use of various types and quantities of hazardous materials.
 - 26.71 Identify sources of detailed and technical information about various hazardous materials.
 - 26.72 Identify the characteristics of corrosives and name the more common corrosives.
 - 26.73 Identify reactive material characteristics and name the more common reactive materials.
 - 26.74 Identify unstable material characteristics and name the more common unstable materials.
 - 26.75 Identify toxic material characteristics and name the more common toxic materials.
 - 26.76 Identify radioactive material characteristics and name the more common radioactive materials.
 - 26.77 Identify oxidizing material characteristics and name the more common oxidizing materials.
 - 26.78 Identify the general fire hazard properties of the various types of plastics.
 - 26.79 Identify the code requirements and regulations for the typical storage, handling, and use of natural and synthetic fibers.
 - 26.80 Identify combustible metal characteristics and name the more common combustible metals.
 - 26.81 Identify the code requirements and regulations relative to the storage, handling, and use of combustible metals.
 - 26.82 Identify combustible dust characteristics and name the more common combustible dusts.
 - 26.83 Identify the basic fire and explosion characteristics of the various combustible dusts.
 - 26.84 Identify the code requirements and regulations relative to the storage and handling of combustible dusts.
- 27.0 DEMONSTRATE KNOWLEDGE OF STANDPIPE AND HOSE SYSTEMS AND WATER SUPPLY SYSTEMS--The student will be able to:
- 27.01 Identify the types of standpipe and hose systems. (See NFPA 14, Standard for the Installation of Standpipe and Hose Systems.)
 - 27.02 Identify standpipe and hose systems and their appurtenances.
 - 27.03 Identify how to evaluate the operational readiness of a standpipe and hose system.
 - 27.04 Identify standpipe and hose system equipment use and capabilities.
 - 27.05 Identify the types of water distribution systems and other water sources in the local community.
 - 27.06 Identify characteristics of private water supply systems.
 - 27.07 Identify and explain the four fundamental components of a modern water system.
 - 27.08 Identify the following parts of a water distribution system: (a) distributors, (b) primary feeders, (c) secondary feeders.
 - 27.09 Identify a: (a) dry barrel hydrant, (b) wet barrel hydrant.
 - 27.10 Define the following terms: (a) normal operation pressure of a water distribution system, (b) residual pressure of a water distribution system, (c) flow pressure.

- 27.11 Identify the following types of water main valves: (a) indicating, (b) nonindicating, (c) post indicator, (d) outside screw and yoke.
 - 27.12 Identify hydrant usability by: (a) obstructions to use of hydrant, (b) direction of hydrant outlets to suitability of use, (c) mechanical aboveground damage, (d) condition of paint for rust or corrosion, (e) the flow by fully opening the hydrant, (f) ability to drain.
 - 27.13 Identify how to evaluate the operational readiness of a water supply system.
 - 27.14 Given a pilot tube and gage, use, read, and record several flow pressures.
 - 27.15 Given a chart, sizes of openings, and flow pressures, determine the quantity of water flowing from the openings.
 - 27.16 Given a chart, identify the approximate discharge capacities of various water pipe sizes.
 - 27.17 Identify the pipe sizes used in water distributions systems for residential, business, and industrial districts.
 - 27.18 Identify two causes of increased resistance or friction loss in water mains.
- 28.0 DEMONSTRATE KNOWLEDGE OF HEAT, SMOKE, AND FLAME DETECTION SYSTEMS--The student will be able to:
- See NFPA 72E, Standard on Automatic Fire Detectors, and NFPA 74, Standard for the Installation, Maintenance, and the Use of Household Fire Warning Equipment.
- 28.01 Identify heat, smoke, and flame detection systems and devices.
 - 28.02 Identify how to evaluate the operational readiness of heat, smoke, and flame detection systems or device.
 - 28.03 Identify the proper installation locations of heat, smoke, and flame detection devices.
- 29.0 DEMONSTRATE KNOWLEDGE OF FIRE ALARM SYSTEMS AND DEVICES--The student will be able to:
- 29.01 Identify local fire alarm systems and devices.
 - 29.02 Identify how to evaluate the operational readiness of local fire alarm systems and devices.
 - 29.03 Identify the warning capability of local fire alarm systems and devices.
 - 29.04 Identify the operation of municipal fire alarm systems.
 - 29.05 Identify the interconnection between local and municipal fire alarm systems.
 - 29.06 Differentiate between residential, local, proprietary, central station, and municipal fire alarm systems.
 - 29.07 Identify the proper installation locations of fire alarm system components or devices.
- 30.0 DEMONSTRATE KNOWLEDGE OF HEATING AND COOKING EQUIPMENT--The student will be able to:

- 30.01 Identify the fire hazards related to the various type of heating and cooking equipment.
- 30.02 Identify the general safeguards incorporated in the various types of heating and cooking equipment systems.
- 30.03 Identify the fire hazards and code requirements related to installation and fuel storage of heating and cooking equipment.
- 30.04 Identify sources of detailed and technical information about heating and cooking equipment.

31.0 DEMONSTRATE KNOWLEDGE OF ELECTRICITY--The student will be able to:

- 31.01 Identify and define elementary electrical principles.
- 31.02 Identify the installation of and safety devices used in electrical systems.
- 31.03 Identify common deficiencies in electrical services and electrical equipment.
- 31.04 Identify the fire and life hazards associated with the typical uses of electricity and electrical systems.

32.0 DEMONSTRATE KNOWLEDGE OF GENERAL FIRE SAFETY--The student will be able to:

- 32.01 Identify code requirements, regulations, basic operational features, and fire hazards presented by various occupancies and, particularly, public assembly, residential, business, mercantile, office, storage, industrial, manufacturing, and utility occupancies.
- 32.02 Identify general fire-safety code requirements and regulations including but not limited to trash and debris, smoking, open burning, maintaining fire department access, housekeeping procedures, reporting of fire incidents, and limiting combustible decorations and furnishings.
- 32.03 Identify the requirements and purpose of emergency evacuation plans.
- 32.04 Identify the duties and responsibilities of a fire inspector assigned to a fire prevention detail in places of public assembly.
- 32.05 Identify the means of egress requirements for various occupancies.
- 32.06 Identify how to determine that existing egress facilities for a given building, floor, or room are adequate for the occupancy involved.
- 32.07 Identify how to determine whether travel distances to exits are within allowable limits.
- 32.08 Identify how to determine whether there is adequate access to egress facilities.
- 32.09 Identify how to determine whether exits are properly illuminated, marked, placed, secured, openable, and equipped with hardware.
- 32.10 Identify how to distinguish between enclosed stairwells and smoke towers, and to determine whether general construction and access are properly maintained.
- 32.11 Identify how to determine whether egress paths are adequate in width and properly illuminated and maintained.

- 32.12 Identify the code requirements and regulations relative to the maintenance of means of egress from various occupancies.

33.0 DEMONSTRATE KNOWLEDGE OF FIRE PROTECTION AND LIFE SAFETY ASPECTS OF BUILDING CONSTRUCTION--The student will be able to:

- 33.01 Identify and define symbols and maps used by the authority having jurisdiction.
- 33.02 Given fire inspection reports for each of the following occupancies, shall evaluate the reports and identify the construction features that might contribute to the spread of fire, heat, and smoke throughout the building or from one building to another: (a) public assembly, (b) educational, (1) residential, (2) nonresidential, (c) institutional, (d) residential, (e) stores and offices, (f) basic industry, (g) manufacturing, (h) storage, (i) special properties.
- 33.03 Demonstrate knowledge of the characteristics of basic building materials and their behavior under fire conditions.
- 33.04 Identify acceptable flame spread and smoke ratings for the various areas of occupancy.
- 33.05 Identify the purpose and acceptability of fire retardant paints and impregnation treatments.
- 33.06 Identify the features of fire protection and life safety related to building construction for various types of occupancies.
- 33.07 Identify acceptable test methods and marking or labeling for building construction assemblies or devices.
- 33.08 Identify types of fire doors and installation requirements.
- 33.09 Identify locations where rated building construction is required.
- 33.10 Identify the general fire behavior expected of each type of building construction, including the spread of fire and the level of safety afforded the building, occupants, and fire fighters.
- 33.11 Identify building construction components installed for fire related purposes including but not limited to fire stops, draft curtains, fire walls, smoke vents, chimneys, flues, and rated ceilings.
- 33.12 Identify the classes of roof covering.
- 33.13 Identify the requirements for and construction of special building construction features including but not limited to projection booths, stages, proscenium openings, and flammable liquid storage rooms.
- 33.14 Identify building construction classification by identifying the principal types of building construction as defined in the building code.
- 33.15 Identify building code contents and requirements.
- 33.16 Identify the types of and installation requirements for building service equipment that can affect fire protection and safety.
- 33.17 Identify the proper installation, maintenance, and use of heating, ventilating, and air conditioning systems from a firesafety standpoint as identified in NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems,

and NFPA 90B, Standard for the Installation of Warm Air Heating and Air Conditioning Systems.

- 33.18 Identify the proper installation, maintenance, and use of kitchen cooking equipment, including hoods and ducts.
- 33.19 Identify the firesafety requirements for decorations, decorative materials, and furnishings.
- 33.20 Identify how to field test decorations, decorative materials, and furnishings for acceptability and use in various occupancies.
- 33.21 Identify the procedures for shutting off the gas, electrical, and water services to a building.

34.0 DEMONSTRATE KNOWLEDGE AND SKILLS RELATED TO CLASSROOM INSTRUCTION, EVALUATION, AND MANAGEMENT--The student will be able to:

- 34.01 Define the following terms and relate the concepts of these terms to fire service instructional activities: (a) course objectives, (b) course outline, (c) feedback, (d) four-step method, (e) instructional materials, (f) instructor, (g) job, (h) job breakdown sheet, (i) key points, (j) lesson plan, (k) level of instruction, (l) materials needed, (m) methods of instruction, (n) minimum acceptable standard, (o) motivation, (p) occupational analysis, (q) performance levels, (r) progress chart, (s) student.
- 34.02 Specifically locate the position of Instructor I within the table of organization, identifying superiors and describing the instructor's role within the organization.
- 34.03 Describe and classify the instructor's responsibility to each of the following: (a) the fire service, (b) the administration, (c) the student.
- 34.04 Describe Equal Opportunity and Affirmative Action programs as they relate to fire service instruction.
- 34.05 Describe safety responsibilities and practices as they relate to fire service instruction.
- 34.06 Demonstrate in a teaching situation the ability to speak in an easily understood manner having the following characteristics: (a) a clear, effectively pitched and well modulated voice, (b) speech that is reasonably free from language errors, (c) a style reasonably free from mannerisms that materially detract, from the teaching effort.
- 34.07 Describe the following four elements of communication: (a) encoding, (b) transmitting, (c) receiving, (d) decoding.
- 34.08 Describe how the following student/instructor factors influence the teaching learning process: (a) attitude, (b) experience, (c) knowledge, (d) education, (e) personality, (f) physical, condition (fatigue, illness, etc.).
- 34.09 Describe the laws and principles of learning.
- 34.10 Describe at least two means of dealing with each of the following types of students: (a) daydreamer, (b) fast learner, (c) shy or timid student, (d) sidetracker or staller, (e) slow learner, (f) troublemaker or "wise guy."
- 34.11 Demonstrate the proper use of the following types of teaching aids and demonstration devices generally employed in training programs: (a) audio/visual equipment, (b) projectable

- instructional materials, (c) nonprojectable instructional materials.
- 34.12 Describe how to organize a teaching/learning setting in an indoor or outdoor facility with regard to: (a) Adequate lighting, (b) freedom from distraction, (c) heating, cooling and ventilation, (d) noise control, (e) seating, (f) use of audio/visual equipment and teaching aids, (g) use of existing classroom facilities such as the chalkboard and bulletin board.
- 34.13 Describe how to organize a teaching/learning setting as a drillground or other outdoor facility with regard for: (a) ability for learners to see and hear all of the instructional effort, (b) audible and visible distractions, (c) inclement weather, (d) visual aid limitations.
- 34.14 Identify and describe the following components of a lesson plan: (a) job title or topic, (b) level of instruction, (c) behavioral objectives or performance objectives, (d) instructional materials needed, (e) references, (f) preparation step (motivation), (g) presentation step, (h) application step, (i) lesson summary, (j) evaluation step, (k) assignment.
- 34.15 Describe methods for conducting a lesson using the: (a) conference method, (b) discussion method, (c) demonstration method, (d) illustration method, (e) lecture method, (f) individualized instruction method.
- 34.16 Given the assignment to teach a fire service subject, demonstrate ability to effect changes in student behavior by utilizing a lesson plan and a technique that employs the following four steps: (a) preparation (motivation), (b) presentation, (c) application, (d) testing.
- 34.17 Describe how to adjust the presentation to ensure class continuity and student interest when the class is interrupted by an unscheduled event.
- 34.18 Describe the benefit of evaluating his/her own performance during an instructional activity.
- 34.19 Identify how to evaluate student performance in order to provide feedback regarding possible revisions in lesson plans or materials.
- 34.20 Demonstrate knowledge of the administration and grading of oral, written, and performance tests that may be required for student evaluation.
- 34.21 Describe procedures for reducing student failure rates by the following methods: (a) bringing about an improved performance, (b) providing individual instruction to improve manipulative skill performance, (c) tutoring a student to improve technical knowledge.
- 34.22 Describe the benefits and purpose of training records and report forms, including progress and achievement reports, and demonstrate their completion.
- 35.0 PARTICIPATE IN FIRE TRAINING EXAMINATIONS--The student will be able to:
- 35.01 Take a test (written/oral) on each academic portion of the outline.
- 35.02 Take a performance test on certain portions of the outline.

36.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 36.01 Conduct a job search.
- 36.02 Secure information about a job.
- 36.03 Identify documents that may be required when applying for a job.
- 36.04 Complete a job application.
- 36.05 Demonstrate competence in job interview techniques.
- 36.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 36.07 Identify acceptable work habits.
- 36.08 Demonstrate knowledge of how to make job changes appropriately.
- 36.09 Demonstrate acceptable employee health habits.

37.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--
The student will be able to:

- 37.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases including HIV infection.
- 37.02 Identify community resources and services available to the victims of sexually transmitted diseases.
- 37.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
- 37.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
- 37.05 Demonstrate knowledge of legal aspects of AIDS.,

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Instructional Services Technology
Occupational Area: Public Service Occupations

PSV

CIP Number 0713.129901
Grade Level College Credits
Length AS Degree/63 Hours

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as educational paraprofessionals, teacher aides (industry title), or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, general education and philosophy; psychological and sociological aspects of teaching the disadvantaged and handicapped; education processes, theories of learning; school procedures; school resources; educational clerical processes, proofreading; test construction, interpretation, evaluation, and grading; audio-visual aids and resources, including tape recorders, motion picture projectors, and slide projectors; duplicating and photocopying equipment; employability skills; leadership and human relations skills; and health and safety.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Both laboratory activities and clinical experiences are integral parts of this curriculum.
- III. **SPECIAL NOTE:** The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Demonstrate an understanding of education from an historical perspective.
- 02.0 Demonstrate an understanding of the sociological trends.
- 03.0 Demonstrate mastery of the role of an education paraprofessional.
- 04.0 Demonstrate an understanding of human growth and development.
- 05.0 Demonstrate a proficiency in the basic skills.
- 06.0 Demonstrate an understanding of instructional techniques.
- 07.0 Demonstrate proficiency at clerical skills.
- 08.0 Demonstrate an understanding of educational media.
- 09.0 Demonstrate employability skills.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Instructional Services Technology
Secondary Number:
Postsecondary Number: 0713.129901

01.0 DEMONSTRATE AN UNDERSTANDING OF EDUCATION FROM AN HISTORICAL PERSPECTIVE--The student will be able to:

- 01.01 Discuss the social, historical, and philosophical foundations of education.
- 01.02 Trace the development of public schooling in Florida.

02.0 DEMONSTRATE AN UNDERSTANDING OF THE SOCIOLOGICAL TRENDS--The student will be able to:

- 02.01 Discuss public attitudes about instruction, curriculum, school management, and the role of educators.
- 02.02 Discuss the role of the parent in the education of his child and identify the teachers role in working with parents.
- 02.03 Discuss the challenges of providing multilingual/multicultural education in Florida.
- 02.04 Demonstrate an understanding of exceptional students and role of the State of Florida in providing for these students.
- 02.05 Explain the sociological aspects of poverty as they relate to education and the schools.
- 02.06 Explain the sociological implications of substance abuse.
- 02.07 List the symptoms and intervention techniques for suicide prevention.
- 02.08 List indicators of child abuse and state the educational, legal and moral responsibilities.
- 02.09 Demonstrate an understanding of forces and factors that effect change within the family.
- 02.10 Identify and list the effects of the increase of one parent households on the schools, particularly K-12.

03.0 DEMONSTRATE MASTERY OF THE ROLE OF AN EDUCATION PARAPROFESSIONAL--The student will be able to:

- 03.01 Define the role of an education paraprofessional.
- 03.02 Discuss the teacher - educational paraprofessional relationship.
- 03.03 Demonstrate appropriate responses to performance evaluation.
- 03.04 Identify acceptable work habits.
- 03.05 Demonstrate acceptable employee grooming and health habits.
- 03.06 Implement values clarification techniques.
- 03.07 List the stress producers in a classroom setting.
- 03.08 Demonstrate mastery of stress-coping techniques and discuss those most appropriate.
- 03.09 List and explain legal responsibilities within the profession.
- 03.10 Demonstrate appropriate time management techniques.
- 03.11 Recognize the importance of planning for each class period.

- 03.12 Prepare a lesson plan with written objectives.
- 03.13 Identify resource staff and their roles.

04.0 DEMONSTRATE AN UNDERSTANDING OF HUMAN GROWTH AND DEVELOPMENT--The student will be able to:

- 04.01 Identify typical and nontypical human development.
 - 1. Conception to Birth: Identify major environmental and genetic factors that impact on prenatal development.
 - 2. Birth to Thirty-six Months
 - A. Articulate major milestones in the following areas:
 - a. motor development
 - b. language development
 - c. social development
 - d. intellectual development
 - e. emotional development
 - B. Identify examples of developmental lag.
 - 3. Middle Childhood
 - A. Demonstrate knowledge of the primary physical, social and emotional characteristics of the child from three to six years.
 - B. Identify the primary characteristics of Piaget's State of Pre-Operations.
 - C. Identify examples of developmental delay.
 - 4. Late Childhood
 - A. Demonstrate knowledge of the primary physical, social and emotional characteristics of the child from six to twelve years.
 - B. Identify the primary characteristics of Piaget's State of Concrete Operations.
 - C. Identify examples of developmental delay.
 - 5. Adolescence
 - A. Identify the primary physical, cognitive, social and emotional characteristics of adolescents.
 - B. Identify the primary developmental tasks of adolescence.
 - 6. Adulthood
 - A. Identify the primary, physical, cognitive and social characteristics of adults.
 - B. Identify the primary developmental tasks of adulthood.
 - C. Identify the stages of death and dying.
- 04.02 Demonstrate in individual and group settings knowledge of human development in relation to age- and culture-appropriate settings and programs.

05.0 DEMONSTRATE A PROFICIENCY IN THE BASIC SKILLS--The student will be able to:

- 05.01 Demonstrate proficiency in listening, speaking, reading and writing.
- 05.02 Demonstrate proficiency in fundamental mathematical concepts and operations.
- 05.03 Demonstrate feeling for dignity and worth of others.
- 05.04 Facilitate positive interaction among peers.
- 05.05 Recognizes needs of exceptional students.

06.0 DEMONSTRATE AN UNDERSTANDING OF INSTRUCTIONAL TECHNIQUES--The student will be able to:

- 06.01 List the factors which influence teacher effectiveness.
- 06.02 Identify the factors involved in classroom management.
- 06.03 Determine the instructional level of educational materials.
- 06.04 Demonstrate effective teaching techniques including but not limited to questioning, practice and feedback.
- 06.05 Demonstrate an understanding of the scope and sequence of curriculum.
- 06.06 List methods to increase student's communication and computation performance.

07.0 DEMONSTRATE PROFICIENCY AT CLERICAL SKILLS--The student will be able to:

- 07.01 Perform clerical skills appropriate for educational operations such as proofreading, filing, and typing tables.
- 07.02 Grade objective tests using answer key.
- 07.03 Demonstrate basic computer skills of keyboarding, entering and reviewing records.
- 07.04 Perform test item analysis.

08.0 DEMONSTRATE AN UNDERSTANDING OF EDUCATIONAL MEDIA--The student will be able to:

- 08.01 Discuss and demonstrate a proficiency in the use of computer based instruction.
- 08.02 Prepare appropriate audio visual aids.
- 08.03 Maintain, store and operate media equipment.
- 08.04 Prepare educational materials including basic artwork or graphic material.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 09.01 Conduct a job search.
- 09.02 Secure information about a job.
- 09.03 Identify documents that may be required when applying for a job.
- 09.04 Complete a job application.
- 09.05 Demonstrate competence in job interview techniques.
- 09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 09.07 Identify acceptable work habits.
- 09.08 Demonstrate knowledge of how to make job changes appropriately.
- 09.09 Demonstrate acceptable employee health habits.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Interpreter Training Program for Hearing Impaired
Occupational Area: Public Service Occupations

PSV

CIP Number 0713.100301
Grade Level College Credits
Length AS Degree/64 Hours

- I. **MAJOR CONCEPTS/CONTENT:** This program is designed to prepare students for employment as interpreters (137.267-010) or interpreter for the hearing impaired (137.267-014) or to provide supplemental training for persons previously or currently employed in these and allied occupations such as nursing, education and human service agencies, etc.

The content includes but is not limited to: components of sign language, including formal and idiomatic signs, fingerspelling, facial expression and body movement; orientation to the various manual systems of communication; principles of American Sign Language (ASL), such as the use of space and grammatical features including syntax; orientation to the cultural and psychosocial aspects of deafness; educational implications; rehabilitation implications; anatomy and physiology of the auditory and vocal mechanism; etiologies of deafness; organizations of and for deaf persons; legal and ethical considerations; and the interpreting process, including voice-to-sign (signing for the hearing person) and sign to voice (voicing for the deaf person). Employability skills are included.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory experience is an integral part of this program. Laboratory experiences should be provided, utilizing a variety of instructional media for the purpose of developing expressive and receptive signing skills. Students should be assigned additional hours of contact with and observations of hearing impaired consumers in a variety of settings, e.g. social organizations, educational programs, and human service agencies. Practicum and internship activities in affiliated community agencies, organizations, and educational facilities will provide opportunities for interpreter trainees to develop interpreting skills, as well as knowledge of community and educational programs for the hearing impaired. Internship experience is required.

III. **SPECIAL NOTE:** Program completers are required to take and pass one of the three evaluation systems:

- 1) the Quality Assurance (QA) Screening of the Florida Registry of Interpreters for the Deaf (FRID),
- 2) the Educational Interpreter Evaluation (EIE) of the FRID, or
- 3) the Certification System of the (national) Registry of Interpreters for the Deaf.

These evaluations are performance-based, testing both signing and voicing ability. In addition, knowledge of Code of Ethics and understanding of the interpreting process and the interpreter's role are assessed through interview and written examination. Each evaluation system has a series of certification levels which are awarded to participants based on their skill.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Demonstrate knowledge of the components and principles of ASL.
- 02.0 Demonstrate knowledge of the various sign systems.
- 03.0 Demonstrate knowledge of the cultural and psychosocial aspects of deafness.
- 04.0 Demonstrate knowledge of the implications of hearing loss for education and habilitation.
- 05.0 Demonstrate an understanding of the ethical and legal aspects of interpreting.
- 06.0 Demonstrate the ability to convey a message using sign language or voice.
- 07.0 Demonstrate employability skills.
- 08.0 Demonstrate an understanding of entrepreneurship.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Interpreter Training Program For Hearing
Impaired
Secondary Number:
Postsecondary Number: 0713.100301

01.0 DEMONSTRATE KNOWLEDGE OF THE COMPONENTS AND PRINCIPLES OF AMERICAN SIGN LANGUAGE--The student will be able to:

- 01.01 Identify the four parameters of ASL: handshape, placement, movement, and orientation.
- 01.02 Recognize and demonstrate the use of ASL classifiers.
- 01.03 Recognize and produce a minimum vocabulary of 2,000 standard signs.
- 01.04 Recognize and produce a minimum of 50 American Sign Language idioms.
- 01.05 Discuss and demonstrate the proper use of space in ASL.
- 01.06 Discuss and demonstrate proper use of economy of movement (motion) in ASL.
- 01.07 Identify patterns of sentence structure in ASL:
 - a) Time indicators
 - b) Visual topics
 - c) Directional verbs
 - d) Pronominal reference
- 01.08 Demonstrate the ability to sequence working vocabulary into appropriate ASL forms.
- 01.09 Demonstrate and explain the role of natural gestures, facial expressions, and body movement in ASL.
- 01.10 Demonstrate the ability to choose conceptually accurate signs for production in ASL.

02.0 DEMONSTRATE KNOWLEDGE OF THE VARIOUS SIGN SYSTEMS--The student will be able to:

- 02.01 Demonstrate knowledge of the history of invented sign systems e.g. LOVE, SEE I.
- 02.02 Use and understand fingerspelling.
- 02.03 Use and understand Pidgen Signed English.
- 02.04 Use and understand manually-coded English e.g. SEE II.

03.0 DEMONSTRATE KNOWLEDGE OF THE CULTURAL AND PSYCHOSOCIAL ASPECTS OF DEAFNESS--The student will be able to:

- 03.01 Describe types and degrees of hearing loss and their implications for communication.
- 03.02 Explain the social and emotional implications of deafness.
- 03.03 Describe the role of American Sign Language in the Deaf community.
- 03.04 Describe the social activities and organizations of the deaf community.

- 03.05 Identify and explain the assistive devices available to hearing impaired persons and the implications of such devices.
- 04.0 DEMONSTRATE KNOWLEDGE OF THE IMPLICATIONS OF HEARING LOSS FOR EDUCATION AND HABILITATION--The student will be able to:
- 04.01 Explain the role of the educational interpreter in the school setting.
 - 04.02 Explain the code of ethics for educational interpreters.
 - 04.03 Describe the educational characteristics and needs of the hearing impaired child.
 - 04.04 Describe the various types of educational programs available to hearing impaired students including different communication methodologies (e.g. Oral, Verbal-tonal, cued speech, Total Communication) and placement options (e.g. mainstreamed settings, full and part-time day classes, residential programs).
 - 04.05 Describe the function of the auditory and vocal mechanism and the etiologies of deafness.
 - 04.06 Describe the types, use and function of amplification and other assistive devices.
 - 04.07 Identify components of aural habilitation (e.g. speech, speech reading, and auditory training).
 - 04.08 Identify habilitative agencies and the services offered e.g. Vocational Rehabilitation, Deaf Service Centers, and other Referral Agencies.
- 05.0 DEMONSTRATE AN UNDERSTANDING OF THE ETHICAL AND LEGAL ASPECTS OF INTERPRETING--The student will be able to:
- 05.01 Explain the five principles of the Code of Ethics of the Registry of Interpreters of the Deaf.
 - 05.02 Explain PL 94-142; Section 504 of Title V of the Rehabilitation Act of 1973 and its amendments, and Florida Statutes pertaining to hearing impaired individuals and interpreters and the implications of the laws and statutes.
 - 05.03 Explain Florida's interpreter evaluation process and its implications for interpreters.
 - 05.04 Explain the Florida Educational Interpreter's Code of Ethics and its' implications.
- 06.0 DEMONSTRATE THE ABILITY TO CONVEY A MESSAGE USING SIGN LANGUAGE OR VOICE--The student will be able to:
- 06.01 Accurately interpret the message of a speaking person to a hearing impaired person(s) using the communication method (signed or voice) most readily understood by the hearing impaired person(s).
 - 06.02 Accurately transliterate the message of a speaking person to a hearing impaired person(s) using the communication method (signed or voice) most readily understood by the hearing impaired person(s).

- 06.03 Accurately interpret the message of a signing person to a hearing impaired person(s) or hearing person(s) through use of voice.
- 06.04 Accurately transliterate the message of a signing person to a hearing impaired person(s) or a hearing person(s) through use of voice.
- 07.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 07.01 Conduct a job search.
 - 07.02 Secure information about a job.
 - 07.03 Identify documents that may be required when applying for a job.
 - 07.04 Complete a job application.
 - 07.05 Demonstrate competence in job interview techniques.
 - 07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 07.07 Identify acceptable work habits.
 - 07.08 Demonstrate knowledge of how to make job changes appropriately.
 - 07.09 Demonstrate acceptable employee health habits.
- 08.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
 - 08.01 Define entrepreneurship.
 - 08.02 Describe the importance of entrepreneurship to the American economy.
 - 08.03 List the advantages and disadvantages of business ownership.
 - 08.04 Identify the risks involved in ownership of a business.
 - 08.05 Identify the necessary personal characteristics of a successful entrepreneur.
 - 08.06 Identify the business skills needed to operate a small business efficiently and effectively.

July 1996

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Law Enforcement
Occupational Area: Public Service Occupations

PSAV

Program Numbers P430105
CIP Number 0743.010700
Grade Level 30, 31
Length Multiple hours
Certification LAW ENF @7 G
CORR OFF @7 G
PUB SERV @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of the program is to prepare students as entry level law enforcement officers, such as Police Officer (industry title), Deputy Sheriff (63032481), State Highway Patrol Officer (industry title), Fish and Game Wardens (industry title) and those occupations listed under 375 and 377 of the Directory of Occupational Titles that require entry level certification in accordance with Chapter 943, Florida Statutes. This program also provides supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, introduction to criminal justice, legal knowledge, patrol techniques, defensive tactics, traffic, vehicle operation, weapons, investigations, first responder techniques, court system, communications and interpersonal skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Practical skills and field exercises are an integral part of this program to include courtroom demeanor and testifying; report writing; identification, collection and preservation of evidence; interviewing and interrogation techniques; radio communications; patrol techniques; traffic direction; traffic accident investigations; police vehicle operation; defensive tactics and arrest techniques; firearms training; chemical agent application; first responder; fingerprinting and sobriety testing.

The teacher/student ratio must be no more than 1:8 when conducting the defensive tactics portion of the training.

On the firing range, the Criminal Justice Standards and Training Commission Policy Manual states that the teacher/student ratio must be no more than 1:6.

- III. **SPECIAL NOTE:** This basic recruit course is established for the purpose of providing job related training at the entry level to candidates for full time or part time law enforcement positions. The minimum length of this program is 520 hours as set by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission (CJSTC) in accordance with Sections 943.12 and 943.13, F.S.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The program may be offered in courses as long as 100% of minimum competencies are taught. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

This program must be offered by a CJSTC certified training center in order for the successfully completing student to be eligible for CJSTC certification.

All instructors must be certified by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission and the Department of Education (DOE), except Community Colleges where DOE certification is not required.

This program/course should be reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, students will be able to:

- 01.0 Describe the criminal justice system and the Florida Criminal Justice Standards and Training Commission.
- 02.0 Explain the law enforcement code of ethics and chain of command.
- 03.0 Explain constitutional law, criminal law, laws of arrest, rules of evidence, search and seizure, juvenile law, surcharges, and civil and criminal liabilities in accordance with Florida Statutes.
- 04.0 Describe and demonstrate patrol procedures.
- 05.0 Demonstrate defensive tactics and arrest techniques.
- 06.0 Direct and control traffic.
- 07.0 Operate a police vehicle safely.
- 08.0 Investigate traffic accidents.

- 09.0 Discuss the legal aspects of firearms. Demonstrate proper use of firearms and chemical agents to include proficiency in accordance with Criminal Justice Standards and Training Commission.
- 10.0 Conduct a crime scene investigation.
- 11.0 Demonstrate proficiency in first responder techniques.
- 12.0 Discuss trial procedures and testify.
- 13.0 Demonstrate communication skills.
- 14.0 Demonstrate interpersonal skills.
- 15.0 Demonstrate employability skills.
- 16.0 Demonstrate knowledge of sexually transmitted diseases, including AIDS.
- 17.0 Demonstrate awareness of ethnically diverse populations.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Law Enforcement
Secondary Number:
Postsecondary Number: P430105

01.0 DESCRIBE THE CRIMINAL JUSTICE SYSTEM AND THE FLORIDA CRIMINAL JUSTICE STANDARDS AND TRAINING COMMISSION--The student will be able to:

- 01.01 Define and identify the major components and general organization of Criminal Justice System.
- 01.02 Explain history and evolution of laws.
- 01.03 Identify the objectives, responsibilities, duties and structure of Criminal Justice Standards and Training Commission.
- 01.04 Identify the various environmental enforcement agencies and their responsibilities and duties.

02.0 EXPLAIN THE LAW ENFORCEMENT CODE OF ETHICS AND CHAIN OF COMMAND--The student will be able to:

- 02.01 Identify and interpret code of ethics and the Canon of Police Ethics.
- 02.02 Discuss the emergence of the law enforcement profession.
- 02.03 Identify the general organizational structure and the chain of command of police agencies.

03.0 EXPLAIN CONSTITUTIONAL LAW, CRIMINAL LAW, LAWS OF ARREST, RULES OF EVIDENCE, SEARCH AND SEIZURE, JUVENILE LAW, SURCHARGES, AND CIVIL AND CRIMINAL LIABILITIES IN ACCORDANCE WITH FLORIDA STATE STATUTES--The student will be able to:

- 03.01 Define legal terms.
- 03.02 Explain constitutional law and describe how it affects law enforcement.
- 03.03 Identify elements of a crime and parties to a crime and describe classification of offenses and intent.
- 03.04 Explain probable cause and burden of proof.
- 03.05 Explain laws of arrest, law enforcement officers' right and duty to make an arrest, and legal show-ups/line-ups.
- 03.06 Explain rules of evidence and their application to law enforcement.
- 03.07 Identify privileged and nonprivileged communication.
- 03.08 Explain stop and frisk laws.
- 03.09 Explain legal aspects of search and seizure.
- 03.10 Differentiate between searches with and without warrant.
- 03.11 Explain civil and criminal liability and surcharges.
- 03.12 Explain civil law in relation to domestic matters.
- 03.13 Discuss Florida juvenile law and the administration, and identify the role of law enforcement officers under the juvenile justice system.
- 03.14 Explain substance control laws.
- 03.15 Explain alcohol and tobacco control laws.

- 03.16 Explain the Baker Act and Meyers Act.
- 03.17 Define the terms attempt, conspiracy, and solicitation.
- 03.18 Explain criminal mischief, public nuisance and crimes against public peace.
- 03.19 Identify the elements of unlawful assemblies/riots and obstruction of justice.
- 03.20 List different ways pornography is distributed.
- 03.21 Explain the RICO act.
- 03.22 Explain extortion, its elements, intent and penalty.
- 03.23 Describe legal and illegal gambling operations in Florida.
- 03.24 Define arson and identify its penalties.
- 03.25 Define concealed weapons and firearms.
- 03.26 Explain the Florida Statutes relating to possession and purchase of weapons and firearms.
- 03.27 Explain the elements of sexual battery.
- 03.28 List and define the common sex crimes.
- 03.29 Explain the elements and various types of assault and of battery.
- 03.30 Identify the elements of robbery.
- 03.31 Explain the Florida laws relating to child abuse and neglect.
- 03.32 Identify the elements of kidnapping, false imprisonment, and child stealing.
- 03.33 Identify the elements for the various forms of homicide.
- 03.34 Explain the Florida laws relating to dealing in stolen property/theft.
- 03.35 Explain the difference between burglary and trespassing.
- 03.36 Explain the Florida laws relating to bribery.
- 03.37 Explain the crime of perjury under Florida law.
- 03.38 Define fraud, forgery and worthless checks.
- 03.39 Explain the connection between embezzlement and white collar crime.
- 03.40 Explain Florida's Repossession Laws.
- 03.41 Explain various codes and prohibitions dealing with vessel law in Florida.
- 03.42 Explain use of force, reasonable force, and deadly force.
- 03.43 Explain effects and liabilities of use of force.

04.0 DESCRIBE AND DEMONSTRATE PATROL PROCEDURES--The student will be able to:

- 04.01 Explain the purposes of patrol.
- 04.02 Identify different types of patrol, their advantages and disadvantages, and patrol hazards.
- 04.03 Use visual perception, discrimination and observation techniques.
- 04.04 Use beat familiarization techniques.
- 04.05 Describe officer survival considerations.
- 04.06 Explain and demonstrate vehicle stops and felony vehicle stops.
- 04.07 Describe and demonstrate prisoner transport methods and custody responsibilities.
- 04.08 Identify and define prisoner custody responsibilities and procedures.
- 04.09 Explain and demonstrate prowler response techniques and crime-in-progress response techniques.
- 04.10 Discuss foot pursuits.

- 04.11 Identify services of the Florida Crime Information Center.
- 04.12 Describe warrants and warrants procedure.
- 04.13 Handle unusual circumstances.
- 04.14 Handle stray animals.
- 04.15 Handle cases of missing children and persons.
- 04.16 Refer individuals to appropriate social service agencies.
- 04.17 Assist victims and witnesses of crimes.
- 04.18 Intervene in domestic violence.
- 04.19 Identify suicide intervention procedures.
- 04.20 Develop and implement crime prevention practices.
- 04.21 Recognize controlled substances and commonly abused drugs.
- 04.22 Handle landlord/tenant disputes.
- 04.23 Describe firefighting principles and procedures.

05.0 DEMONSTRATE DEFENSIVE TACTICS AND ARREST TECHNIQUES--The student will be able to:

- 05.01 Identify and demonstrate pedestrian approach procedures.
- 05.02 Use unarmed defensive tactics, restraining devices, and police baton.
- 05.03 Demonstrate arrest, search, and control techniques.
- 05.04 Fingerprint persons.
- 05.05 Control crowd and mob.

06.0 DIRECT AND CONTROL TRAFFIC--The student will be able to:

- 06.01 Explain traffic enforcement concepts and techniques.
- 06.02 Explain the driver licensing law.
- 06.03 Identify the most frequently used sections of the Florida traffic code.
- 06.04 Conduct a field sobriety test and identify impaired driver violations.
- 06.05 Write a uniform traffic citation.
- 06.06 Direct and control traffic flow of vehicles and pedestrians using hand signals, gestures, and flashlights.

07.0 OPERATE A POLICE VEHICLE SAFELY--The student will be able to:

- 07.01 Explain the legal liability when operating an emergency vehicle.
- 07.02 Inspect a police vehicle.
- 07.03 Operate a police vehicle.

08.0 INVESTIGATE TRAFFIC ACCIDENTS--The student will be able to:

- 08.01 Identify traffic accident investigation techniques and procedures.
- 08.02 Explain traffic accident scene management procedures.
- 08.03 Inspect vehicles involved in accidents, roadway signs and signals.
- 08.04 Measure, sketch and identify reasons for photographing accident scenes.
- 08.05 Compute skid mark evidence.
- 08.06 Complete accident report forms and write an accident report.

08.07 Explain organ and tissue donation program in relation to traffic accidents.

09.0 DISCUSS THE LEGAL ASPECTS OF FIREARMS. DEMONSTRATE PROPER USE OF FIREARMS AND CHEMICAL AGENTS TO INCLUDE PROFICIENCY IN ACCORDANCE WITH CRIMINAL JUSTICE STANDARDS AND TRAINING COMMISSION--The student will be able to:

- 09.01 Explain ammunition.
- 09.02 Demonstrate service weapon use.
- 09.03 Demonstrate shotgun use.
- 09.04 Explain and demonstrate firearms safety procedures.

10.0 CONDUCT A CRIME SCENE INVESTIGATION--The student will be able to:

- 10.01 Explain preliminary investigation for crimes against property.
- 10.02 Explain preliminary investigation for crimes against persons.
- 10.03 Explain investigative techniques for narcotics and dangerous drugs.
- 10.04 Explain vice investigative techniques.
- 10.05 Explain organized crime.
- 10.06 Explain terrorist activity investigative techniques.
- 10.07 Explain bombs/explosives violation investigative techniques.
- 10.08 Explain death recognition concepts.
- 10.09 Explain S.I.D.S. procedures.
- 10.10 Conduct an interview with witnesses, victims and a suspect.
- 10.11 Differentiate between interviews and interrogations.
- 10.12 Explain surveillance techniques.
- 10.13 Explain preliminary, follow-up investigative procedures.
- 10.14 Explain methods for developing sources of information.
- 10.15 Explain and demonstrate crime scene search procedures.
- 10.16 Protect or guard crime scene.
- 10.17 Measure, diagram, sketch and identify reasons for photographing evidence.
- 10.18 Locate, collect and record (retrieve, package and seal, label, tag, and mail) evidence.
- 10.19 Locate and develop latent prints.
- 10.20 Follow chain of custody.

11.0 DEMONSTRATE PROFICIENCY IN FIRST RESPONDER TECHNIQUES--The student will be able to:

- 11.01 Identify and demonstrate first responder techniques.
- 11.02 Demonstrate Cardiopulmonary Resuscitation (CPR) techniques.
- 11.03 Discuss health issues that first responders encounter most often.

12.0 DISCUSS TRIAL PROCEDURES AND TESTIFY--The student will be able to:

- 12.01 Explain Florida court structure and court rules.
- 12.02 Discuss pretrial, trial, and post-trial procedures.
- 12.03 Explain subpoenas.
- 12.04 Demonstrate courtroom demeanor and testify as a witness.
- 12.05 Explain how courts relate to law enforcement.

13.0 DEMONSTRATE COMMUNICATION SKILLS--The student will be able to:

- 13.01 Use telephone and police radio courteously and relay message.
- 13.02 Explain notetaking and reporting procedures.
- 13.03 Write police reports.
- 13.04 Prepare investigation report.
- 13.05 Demonstrate nonverbal communication techniques.
- 13.06 Explain procedures to follow when taking statements.

14.0 DEMONSTRATE INTERPERSONAL SKILLS--The student will be able to:

- 14.01 Explain law enforcement officers' public relations techniques.
- 14.02 Explain human behavior.
- 14.03 Demonstrate interpersonal communication techniques.
- 14.04 Explain and demonstrate counseling techniques.
- 14.05 Demonstrate crisis intervention techniques.
- 14.06 Recognize stress and explain methods of stress reduction.
- 14.07 Explain problems of juveniles.
- 14.08 Recognize indications of child abuse and identify reporting procedures.
- 14.09 Explain problems of the elderly.
- 14.10 Explain problems of ethnic and cultural groups.
- 14.11 Explain problems of mentally ill or mentally handicapped persons.
- 14.12 Explain problems of physically handicapped persons.
- 14.13 Explain problems of alcohol and drug abusers.

15.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 15.01 Conduct a job search.
- 15.02 Secure information about a job.
- 15.03 Identify documents that may be required when applying for a job.
- 15.04 Complete a job application.
- 15.05 Demonstrate competence in job interview techniques.
- 15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 15.07 Identify acceptable work habits.
- 15.08 Demonstrate knowledge of how to make job changes appropriately.
- 15.09 Demonstrate acceptable employee health habits.

16.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--
The student will be able to:

- 16.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases.
- 16.02 Identify community resources and services available to the victims of sexually transmitted diseases.
- 16.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
- 16.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all

patients following Centers for Disease Control (CDC) guidelines.

- 16.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

17.0 DEMONSTRATE AWARENESS OF ETHNICALLY DIVERSE POPULATIONS--The student will be able to:

- 17.01 Define ethnicity, race, culture and explain how culture influences us on a day to day basis.
- 17.02 Recognize statements which cause resentment in others of diverse cultures.
- 17.03 Identify at least three factors that contribute to cross-cultural conflict.
- 17.04 Identify cultural attributes and demonstrate an awareness of their impact on communication.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Law Enforcement Auxiliary Officer
Occupational Area: Public Service Occupations

PSAV

Program Numbers P430115
CIP Number 0743.010701
Grade Level 30, 31
Length 97 hours minimum
Certification LAW ENF @7 G
PUB SERV @7 G

- I. **MAJOR CONCEPTS/CONTENT:** This program is designed to prepare students for employment as law enforcement auxiliary officers (Industry Title) or to provide supplemental training for persons previously or currently employed in this occupation. Employment as a law enforcement auxiliary officer requires certification in accordance with Chapter 943, Florida Statutes.

The content includes, but is not limited to, basic law for law enforcement, investigation procedures, court procedures, patrol procedures, community relations, traffic control, juvenile procedures, defensive tactics, firearms, and first aid and cardiopulmonary resuscitation (CPR).

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Through hands-on and field activities, the students will gain experience in traffic control, defensive tactics, use of firearms and CPR.

The teacher/student ratio must be no more than 1:8 when conducting the defensive tactics portion of the training.

On the firing range, the Criminal Justice Standards and Training Commission Policy Manual states that the teacher/student ratio must be no more than 1:6.

- III. **SPECIAL NOTE:** Minimum length of this program is 97 hours as established by the Criminal Justice Standards and Training Commission (CJSTC) in accordance with Florida Administration Code 11B-29 and 943.12 F.S. Due to this short period of program length, students are not expected to perform actual duties upon completion of the program but to know the

content covered in this program. Trainees should be trained to perform actual job skills on the job.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The program may be offered in courses as long as 100% of minimum competencies are taught. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

All instructors must be certified by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission and the Department of Education (DOE), except Community Colleges where DOE certification is not required.

This program must be offered by a CJSTC certified training center in order for the successfully completing student to be eligible for CJSTC certification.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Identify constitutional law, criminal law, laws of arrest, and rules of evidence.
- 02.0 Identify investigation procedures and assist at crime/accident scene.
- 03.0 Identify court organization and procedures.
- 04.0 Identify patrol techniques and operations, and assist in patrolling.
- 05.0 Describe good public relations and assist law enforcement officers in handling situations which result from conflict of behavior or different background.
- 06.0 Assist in controlling traffic and identify accident report procedures.
- 07.0 Identify techniques and procedure in working with juvenile offenders.
- 08.0 Use defensive tactics.
- 09.0 Demonstrate firearm safety and qualification with service weapon.
- 10.0 Apply first aid and CPR.
- 11.0 Demonstrate employability skills.
- 12.0 Demonstrate knowledge of sexually transmitted diseases, including AIDS.
- 13.0 Demonstrate awareness of ethnically diverse populations.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Law Enforcement Auxiliary Officer
Secondary Number:
Postsecondary Number: P430115

- 01.0 IDENTIFY CONSTITUTIONAL LAW, CRIMINAL LAW, LAWS OF ARREST, AND RULES OF EVIDENCE--The student will be able to:
- 01.01 Identify constitutional law and criminal law.
 - 01.02 Identify appropriate sections of Florida Statute reference arrest laws.
 - 01.03 Discuss rules of evidence.
 - 01.04 Identify search and seizure and arrest laws.
 - 01.05 Explain when an arrest may be made without a warrant.
- 02.0 IDENTIFY INVESTIGATION PROCEDURES AND ASSIST AT CRIME/ACCIDENT SCENE--The student will be able to:
- 02.01 Identify and explain crime scene protection.
 - 02.02 Identify and explain evidence collection.
 - 02.03 Explain interviews and interrogation.
 - 02.04 Identify different types of police reports.
 - 02.05 Assist law enforcement officers at crime/accident scene.
- 03.0 IDENTIFY COURT ORGANIZATION AND PROCEDURES--The student will be able to:
- 03.01 Explain court organization, functions, and procedures.
 - 03.02 Explain court demeanor and testifying
 - 03.03 Identify common pitfalls facing the new officer in court.
- 04.0 IDENTIFY PATROL TECHNIQUES AND OPERATIONS, AND ASSIST IN PATROLLING--The student will be able to:
- 04.01 Identify different types of patrol techniques.
 - 04.02 Identify types of communication equipment, its usage and role.
 - 04.03 Identify record keeping systems.
 - 04.04 Identify the proper procedures in handling domestic complaints, prowler and disturbance calls.
 - 04.05 Identify proper procedures in responding to alarm sounding calls.
 - 04.06 Assist law enforcement officers in patrolling.
- 05.0 DESCRIBE GOOD PUBLIC RELATIONS AND ASSIST LAW ENFORCEMENT OFFICERS IN HANDLING SITUATIONS WHICH RESULT FROM CONFLICT OF BEHAVIOR OR DIFFERENT BACKGROUND--The student will be able to:
- 05.01 Describe good public relations.
 - 05.02 Define human relations.
 - 05.03 Describe the relationship between law enforcement and minority groups.

- 05.04 Assist law enforcement officers in handling situations which result from conflict of behavior or different background.
- 06.0 ASSIST IN CONTROLLING TRAFFIC AND IDENTIFY ACCIDENT REPORT PROCEDURES--
The student will be able to:
- 06.01 Demonstrate traffic direction techniques.
 - 06.02 Explain and demonstrate citation mechanics.
 - 06.03 Identify and demonstrate traffic law enforcement.
 - 06.04 Identify and explain accident reporting forms and procedures.
 - 06.05 Assist law enforcement officers in controlling traffic.
- 07.0 IDENTIFY TECHNIQUES AND PROCEDURE IN WORKING WITH JUVENILE OFFENDERS--
The student will be able to:
- 07.01 Identify appropriate sections of Florida Statutes for juvenile law.
 - 07.02 Identify juvenile court procedures.
 - 07.03 Identify juvenile detention procedures.
 - 07.04 Identify the proper attitude, methods, and techniques in working with juvenile offenders.
- 08.0 USE DEFENSIVE TACTICS--The student will be able to:
- 08.01 Identify and explain crowd and riot control tactics.
 - 08.02 Identify and demonstrate search and arrest techniques.
 - 08.03 Identify and demonstrate self defense tactics.
- 09.0 DEMONSTRATE FIREARM SAFETY AND QUALIFICATION WITH SERVICE WEAPON--The student will be able to:
- 09.01 Discuss legal aspects of firearms.
 - 09.02 Identify and explain service weapons and nomenclature.
 - 09.03 Explain and demonstrate use of chemical agents and protective devices.
 - 09.04 Describe use and limitations of the alternate service weapons.
 - 09.05 Demonstrate range training and qualification with handgun and shotgun.
- 10.0 APPLY FIRST AID AND CPR--The student will be able to:
- 10.01 Explain and demonstrate first aid techniques.
 - 10.02 Explain and demonstrate choking maneuver.
 - 10.03 Explain and demonstrate cardiopulmonary resuscitation (CPR).
- 11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 11.01 Conduct a job search.
 - 11.02 Secure information about a job.
 - 11.03 Identify documents that may be required when applying for a job.
 - 11.04 Complete a job application.
 - 11.05 Demonstrate competence in job interview techniques.

- 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate knowledge of how to make job changes appropriately.
- 11.09 Demonstrate acceptable employee health habits.

12.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--
The student will be able to:

- 12.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases.
- 12.02 Identify community resources and services available to the victims of sexually transmitted diseases.
- 12.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
- 12.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
- 12.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

13.0 DEMONSTRATE AWARENESS OF ETHNICALLY DIVERSE POPULATIONS--The student will be able to:

- 13.01 Define ethnicity, race, culture and explain how culture influences us on a day to day basis.
- 13.02 Recognize statements which cause resentment in others of diverse cultures.
- 13.03 Identify at least three factors that contribute to cross-cultural conflict.
- 13.04 Identify cultural attributes and demonstrate an awareness of their impact on communication.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Legal Assisting
Occupational Area: Public Service Occupations

PSV

CIP Number 0722.010300
Grade Level College Credits
Length AS Degree/64 Hours

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as paralegal assistant (119.267-026), title examiner (119.287-010), abstractor (119.267-010), or paralegal personnel (10242203) or to provide supplemental training for persons previously or currently employed in these occupations. The program should meet the requirements of Legal Assistant education programs recommended by the American Bar Association.

The content includes, but is not limited to, legal research and legal writing; litigation and trial practice; corporate law; wills, estates and trusts; tort law; family law; law office management; real property law; federal income tax law; criminal law; constitutional law; ethics and code of professional responsibility; contract law; employability skills; leadership and human relations skills; and health and safety.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory/library research experiences are an integral part of the program. Word processing and computer competencies should also be developed.
- III. **SPECIAL NOTE:** The National Association of Legal Assistants (NALA) certification examination is available to graduates of this program.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Demonstrate knowledge of the ethical and professional standards of the legal assistant.
- 02.0 Demonstrate ability to utilize the law library and apply knowledge to legal writing.
- 03.0 Demonstrate knowledge of tort law, constitutional law, and criminal law concepts and their application to factual situations.
- 04.0 Demonstrate knowledge of all phases of trial practice and procedure. Demonstrate knowledge of practice and procedure of tribunals before which the legal paraprofessional is authorized to represent clients under the supervision of a licensed attorney.
- 05.0 Demonstrate knowledge of real property law and its application to real property transactions.
- 06.0 Demonstrate knowledge of estate planning and probate administration concepts and their application to probate procedures.
- 07.0 Demonstrate knowledge of the fundamental principals of the law of business organizations.
- 08.0 Demonstrate knowledge of legal forms and ability to prepare legal documents. Demonstrate legal writing skills, including how to solve legal problems by analyzing complex factual matters, and applying appropriate legal authority.
- 09.0 Demonstrate knowledge of the fundamental principles of contract law including the UniformCommercial Code.
- 10.0 Demonstrate knowledge of and ability to perform advanced litigation techniques and procedures.
- 11.0 Demonstrate knowledge of and ability to perform advanced real estate and property transaction procedures.
- 12.0 Demonstrate knowledge of and ability to prepare management techniques and procedures.
- 13.0 Demonstrate knowledge of family law and procedure.
- 14.0 Demonstrate knowledge of the Internal Revenue Code and principles involved in preparing basic tax forms.
- 15.0 Demonstrate employability skills.
- 16.0 Demonstrate an understanding of entrepreneurship.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Legal Assisting
Secondary Number:
Postsecondary Number: 0722.010300

01.0 DEMONSTRATE KNOWLEDGE OF THE ETHICAL AND PROFESSIONAL STANDARDS OF THE LEGAL ASSISTANT--The student will be able to:

- 01.01 Define a variety of legal terms.
- 01.02 Contrast the duties and responsibilities of the legal secretary with those of the legal assistant (paralegal).
- 01.03 List five typical duties of the legal assistant.
- 01.04 List four activities legal assistants are prohibited from doing.
- 01.05 Briefly outline the history and development of the occupation of legal assistant.
- 01.06 Write a convincing statement as to why a lawyer should hire a graduate of a good legal assistant program.
- 01.07 Explain how lawyers and paralegal personnel function in our legal system.
- 01.08 List and explain the basic sequence of events in a jury trial.
- 01.09 List and discuss the basic rules of ethics in the legal profession.
- 01.10 Discuss what constitutes legal malpractice and illustrate the discussion with examples of malpractice.
- 01.11 List the advantages and disadvantages of data processing and word processing in a law office.

02.0 DEMONSTRATE ABILITY TO UTILIZE THE LAW LIBRARY AND APPLY KNOWLEDGE TO LEGAL WRITING--The student will be able to:

- 02.01 Explain the federal court system. Explain the court system of the State of Florida.
- 02.02 List the basic steps in legal research.
- 02.03 List and explain the different State and Federal courts, and describe the jurisdiction of each.
- 02.04 Discuss the fundamental features of civil litigation, criminal and administrative procedures.
- 02.05 Discuss the term "authority" as it is used in legal writing, and explain the hierarchy of authority, and the difference between mandatory and persuasive authority.
- 02.06 Discuss case law, how it is made, its component parts, and how to use cases to resolve a legal problem.
- 02.07 Contrast case law with statutory law, and explain how to interpret statutes, using both intrinsic and extrinsic sources.
- 02.08 Demonstrate how to "brief" a case.
- 02.09 Explain the difference between legal publications, treatises and other legal writings.
- 02.10 List the legal publications most commonly used in the practice of law.

- 02.11 What are administrative rules or regulations? Do these have the force of laws?
- 02.12 Given a hypothetical case, find applicable statutory law.
- 02.13 Given a hypothetical case, find applicable regulatory law.
- 02.14 Given a hypothetical case, find applicable case law.
- 02.15 Demonstrate how to analogize the facts and law of one case to the facts of a given legal problem.
- 02.16 Demonstrate a working knowledge of the legal research system, by writing a short memorandum on a given question of law, and explaining the steps taken in finding the sources and reaching the conclusions.
- 02.17 Demonstrate the ability to use the uniform system of citing cases, and also the Shepard System of cross referencing cases.

03.0 DEMONSTRATE KNOWLEDGE OF TORT LAW, CONSTITUTIONAL LAW, AND CRIMINAL LAW CONCEPTS AND THEIR APPLICATION TO FACTUAL SITUATIONS--The student will be able to:

- 03.01 Define the following tort concepts as well as apply the concepts to factual situations:
 - a. Intentional torts as regards interference with persons
 - b. Intentional torts as regards interference with Property
 - c. Defenses to an intentional tort
 - d. Negligence and the elements of negligence
 - e. Reasonable man
 - f. Res Ipsa Loquitur
 - g. Proximate cause
 - h. Defenses to negligence actions
 - i. Strict liability
 - j. Product liability
- 03.02 Discuss the United States Constitution in the following areas:
 - a. The philosophical underpinnings of the Constitution.
 - b. The structure of the Constitution.
 - c. The Bill of Rights.
 - d. The Fourteenth Amendment as regards:
 - 1. Due Process Clause, and substantive due process as contrasted to procedural due process.
 - 2. Equal Protection Clause.
- 03.03 Discuss and define terms and concepts of Criminal Law to include:
 - a. The Theory of Criminal Law. Distinguish the concepts of Malum in se and Malum prohibitum.
 - b. The evolving nature of criminal law, e.g. the legal definition of a viable human being.
 - c. Crimes against persons: types and the elements of each.
 - d. Crimes against property: types and the elements of each.
 - e. Overlapping crimes against the person and against property.
 - f. The general principles of Criminal Law:
 - 1. Conspiracy
 - 2. Attempt
 - g. Defenses to Criminal Prosecution.
- 03.04 Discuss Criminal Procedure. Discuss each stage in a criminal proceeding from investigation to conviction. Discuss post conviction procedures.

04.0 DEMONSTRATE KNOWLEDGE OF ALL PHASES OF TRIAL PRACTICE AND PROCEDURE.
DEMONSTRATE KNOWLEDGE OF PRACTICE AND PROCEDURE OF TRIBUNALS BEFORE
WHICH THE LEGAL PRAPROFESSIONAL IS AUTHORIZED TO REPRESENT CLIENTS UNDER
THE SUPERVISION OF A LICENSED ATTORNEY--The student will be able to:

- 04.01 Define a variety of terms associated with litigation and trial practice.
- 04.02 Prepare a complaint form from information given in a simple hypothetical situation.
- 04.03 Explain the sequence and basic contents of the pleadings.
- 04.04 List and briefly explain six causes of action in civil cases.
- 04.05 Explain the basic concept of the Statute of Limitations.
- 04.06 Discuss the purpose of discovery and how it works.
- 04.07 Discuss the basic rules of evidence.
- 04.08 Describe the purpose and contents of a "Fact Trial Brief," and a "Trial Brief on the Law."
- 04.09 Describe the typical steps in a civil trial from the opening statements through the appeal, if any.

05.0 DEMONSTRATE KNOWLEDGE OF REAL PROPERTY LAW AND ITS APPLICATION TO REAL
PROPERTY TRANSACTIONS--The student will be able to:

- 05.01 Define a variety of terms associated with real estate transactions.
- 05.02 Discuss some of the important real property concepts.
- 05.03 Contrast the basic responsibilities of the lawyer and the real estate broker in the conveyance of real property, from the sales or option contract to the recording of the deed.
- 05.04 Describe the basic requirements of a contract for sale of real property.
- 05.05 Discuss the purpose of a title search and how the "search" is made.
- 05.06 Explain how "recording" is accomplished and the importance of recording a deed, mortgage, or other real estate documents.
- 05.07 List and explain the most common forms of limitations on real property use such as covenants, zoning laws, and land use regulations.
- 05.08 Briefly explain the various liens and encumbrances that can be placed against real property.
- 05.09 Describe the steps and procedures in a typical real estate closing.
- 05.10 Define the types of estates that can be conveyed under Florida law.
- 05.11 Prepare a closing statement from information given in a hypothetical case.
- 05.12 Briefly contrast personal property with real property.

06.0 DEMONSTRATE KNOWLEDGE OF ESTATE PLANNING AND PROBATE ADMINISTRATION
CONCEPTS AND THEIR APPLICATION TO PROBATE PROCEDURES--The student will be able to:

- 06.01 Define a variety of terms associated with wills, trusts and probate administration.

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- 06.02 Define a variety of legal concepts.
- 06.03 Explain the purpose of a will, and how to prove a will.
- 06.04 Explain the requirements of, and draft, a Simple Will, in accordance with Florida Statutes.
- 06.05 Explain the requirements of, and draft, a Codicil, in accordance with Florida Statutes.
- 06.06 Define a simple Inter Vivos, and a Testamentary trust.
- 06.07 Prepare a simple estate tax return.
- 06.08 Explain the procedures of Probate in general and in detail in accordance with Florida Statutes.

07.0 DEMONSTRATE KNOWLEDGE OF THE FUNDAMENTAL PRINCIPALS OF THE LAW OF BUSINESS ORGANIZATIONS--The student will be able to:

- 07.01 Define a variety of terms associated with corporate law.
- 07.02 Define and state the major advantages and disadvantages of sole proprietorship, general partnership, limited partnership, and corporation (to include the close and professional corporations).
- 07.03 Discuss the source of powers for the corporation.
- 07.04 Describe the procedures and steps leading to incorporation, and include in the discussion the pre-incorporation responsibility, selection of the corporate name, the articles of incorporation and by-laws.
- 07.05 Discuss the rights and duties of the shareholders, the Board of Directors, the Officers, and employees.
- 07.06 Explain the corporate financial structure.
- 07.07 Discuss or explain Power of the Board of Directors regarding dividends and other distributions.
- 07.08 Explain how the corporate structure can be changed and how dissolution of a corporation can be accomplished.
- 07.09 Contrast the liability of a partner in a partnership with a stockholder in a corporation.
- 07.10 Discuss the nature of the agency relationship to include the duties and liabilities of the principal, the agent, and third parties.
- 07.11 Contrast the taxing of a partnership with taxing a corporation (Federal taxes only).
- 07.12 List what state and local taxes apply to businesses in Florida.

08.0 DEMONSTRATE KNOWLEDGE OF LEGAL FORMS AND ABILITY TO PREPARE LEGAL DOCUMENTS. DEMONSTRATE LEGAL WRITING SKILLS, INCLUDING HOW TO SOLVE LEGAL PROBLEMS BY ANALYZING COMPLEX FACTUAL MATTERS, AND APPLYING APPROPRIATE LEGAL AUTHORITY--The student will be able to:

- 08.01 Draft an outline of a U.S. Supreme Court opinion.
- 08.02 Draft a simple appellate brief.
- 08.03 Draft an office memorandum based on a substantial question of law.
- 08.04 Draft a pleading stating a civil cause of action, based on facts provided in a hypothetical situation.
- 08.05 Discuss the purpose and format of the legal memorandum.
- 08.06 Indicate the progress of statutes and cases via the Shepard Citation System.

08.07 List the Rules of Good Legal Writing.

09.0 DEMONSTRATE KNOWLEDGE OF FUNDAMENTAL PRINCIPLES OF CONTRACT LAW INCLUDING THE UNIFORM COMMERCIAL CODE--The student will be able to:

- 09.01 Demonstrate knowledge of the elements of a contract.
- 09.02 Demonstrate knowledge of contract terminology.
- 09.03 Recognize and identify the differences between void and voidable contracts.
- 09.04 Demonstrate knowledge of the statute of frauds.
- 09.05 Demonstrate knowledge of the Parol Evidence Rule.
- 09.06 Recognize and identify various types of contracts, such as adhesion, bilateral, unilateral, implied, and express.
- 09.07 Demonstrate ability to prepare a basic contract given a set of facts.
- 09.08 Demonstrate knowledge of specific performance, breach of contract, and remedies for breach of contract.
- 09.09 Demonstrate knowledge of 3rd party beneficiary contracts.
- 09.10 Demonstrate knowledge of requirements for modification of contracts and assignments of contracts.

10.0 DEMONSTRATE KNOWLEDGE OF AND ABILITY TO PERFORM ADVANCED LITIGATION TECHNIQUES AND PROCEDURES--The student will be able to:

- 10.01 Describe the various types of interviews that a paralegal would conduct.
- 10.02 State what the paralegal would need to know prior to the interview, and also describe the materials needed in preparation for the interview.
- 10.03 Describe the techniques for asking questions, and also list the basic points for good listening.
- 10.04 Describe the form, or format, that the paralegal would use to present the results of the interview to the attorney.
- 10.05 Describe the purpose of background investigations and analysis.
- 10.06 List the sources of information for conducting the background investigations.
- 10.07 Describe how the results of the background investigation and analysis can be presented to the attorney.
- 10.08 Describe how evidence/exhibits are organized for trial.
- 10.09 Discuss the evaluation and use of the evidence.
- 10.10 Describe the methods of indexing and organizing the material, to include the number of copies to prepare.
- 10.11 Describe what is meant by pre-trial discovery.
- 10.12 Define motion practice and give two examples.
- 10.13 Outline the presentation of the case at trial using hypothetical information.
- 10.14 Present standard jury instructions for the case in 10.13.
- 10.15 Define appeals and describe their use.

11.0 DEMONSTRATE KNOWLEDGE OF AND ABILITY TO PERFORM ADVANCED REAL ESTATE AND PROPERTY TRANSACTION PROCEDURES--The student will be able to:

- 11.01 Define a variety of terms associated with real estate transactions to include: landlord, lessor, lessee, tenant,

- sublease, security deposit, grantor, grantee, appurtenance, fixture, "race" statutes, metes and bounds survey, tenants in common, and joint tenants.
- 11.02 Discuss some of the real property concepts such as: Quit Claim deed, warranty deed leasehold and assignment.
 - 11.03 Draft a sales agreement, from information given in a case.
 - 11.04 Draft a lease, from information given in a case.
 - 11.05 Draft a promissory note, from information given in a case.
 - 11.06 Draft an option contract, from information given in a case.
 - 11.07 Draft an easement.
 - 11.08 From a fictitious situation given, plan and execute a real estate closing.
 - 11.09 Critique a title search, from title insurance, and explain how it is provided to the real estate owner.
 - 11.10 Discuss the agreement for deed and some of the various types of mortgages such as the variable rate mortgage.
 - 11.11 Discuss basic condominium concepts and the condo filing requirements in Florida.
- 12.0 DEMONSTRATE KNOWLEDGE OF ABILITY TO PREPARE MANAGEMENT TECHNIQUES AND PROCEDURES--The student will be able to:
- 12.01 Define a variety of terms to include, but not limited to: Delegation, Unity of Command, Planning, Organizing, Controlling, Tickler System, Job Enrichment Activities, Docket Control, and Espirit de Corps.
 - 12.02 Discuss various management concepts to include the following: McGregor's Theory X and Theory Y; Classical Theory versus Human Relations Theory; Maslow's Hierarchy of Needs; and the Scanlon Plan.
 - 12.03 List and contrast three of the most commonly used forms of business utilized by law firms.
 - 12.04 List and briefly discuss six of the recommended techniques for improving the confidence that clients will have in the personnel of the law office.
 - 12.05 Discuss the various aspects of fee setting in the law office to include fixed fees, minimum fees, contingent fees, retainers, payment schedules and billing practice.
 - 12.06 Describe the steps and procedures involved in recruiting and selecting personnel for the law office.
 - 12.07 List and discuss four rules of interviewing.
 - 12.08 Discuss how the duties of the legal secretary differ from those of the legal assistant.
 - 12.09 Describe how client files are opened, maintained and closed.
 - 12.10 Describe the law office staff manual, state who should maintain it, and the recommended contents of the manual.
 - 12.11 Prepare an office layout for an organization given in a hypothetical situation.
 - 12.12 Describe a filing system that would be suitable for a small law office. include in the discussion how the retrieval of documents would be accomplished.
- 13.0 DEMONSTRATE KNOWLEDGE OF FAMILY LAW AND PROCEDURE--The student will be able to:

- 13.01 Define a variety of legal terms such as: cohabitation, common-law marriage, fraud, duress, consummate, shared parental responsibility.
- 13.02 Define the requirements for a valid marriage in the State of Florida.
- 13.03 Discuss all aspects of a dissolution of marriage, including dissolution, child custody, child support, alimony, property rights, and modification of these items.
- 13.04 List the grounds needed to obtain a dissolution of marriage in Florida and an annulment of a marriage.
- 13.05 Discuss the law in the State of Florida regarding parent and child relationships including infancy and illegitimate children.
- 13.06 Discuss the law in the State of Florida concerning adoptions, who may adopt, who may be adopted, who's consent is required for the adoption, when the natural parents' rights are terminated, when the adoptive parents' are created, and the effect of an adoption decree.
- 13.07 Explain the procedure to obtain a change of name.
- 13.08 Discuss the Uniform Child Custody and Support Act.
- 13.09 Discuss prenuptial/antenuptial agreements and property settlements.

14.0 DEMONSTRATE KNOWLEDGE OF INTERNAL REVENUE CODE AND PRINCIPLES INVOLVED IN PREPARING BASIC TAX FORMS--The student will be able to:

- 14.01 Define a variety of terms relating to taxation to include the following: adjusted basis, adjusted gross income, amount realized, basis, depreciation, fair market value, gift, personal expenses, prizes and awards, realized gain or loss, recognized gain or loss, and zero bracket amount.
- 14.02 Explain various taxation concepts to include the following: gross income, along with an explanation of the most common inclusions and exclusions; assignment of income, to include how different brackets may affect a single family; tax litigation procedures, to include strategy of where to start case and where appeals are most effective; deductions; and gain.
- 14.03 Prepare income tax submissions on a Form 1040, a 1040A and a 1040EZ for a simple tax case/problem.
- 14.04 Demonstrate the ability to use the U.S. Tax Code.
- 14.05 Discuss the tax consequences of marriage, divorce, death, and business organizations.

15.0 DEMONSTRATE KNOWLEDGE OF EMPLOYABILITY SKILLS--The student will be able to:

- 15.01 Conduct a job search.
- 15.02 Secure information about a job.
- 15.03 Identify documents that may be required when applying for a job.
- 15.04 Complete a job application.
- 15.05 Demonstrate competence in job interview techniques.

- 15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 15.07 Identify acceptable work habits.
 - 15.08 Demonstrate knowledge of how to make job changes appropriately.
 - 15.09 Demonstrate acceptable employee health habits.
- 16.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
- 16.01 Define entrepreneurship.
 - 16.02 Describe the importance of entrepreneurship to the American economy.
 - 16.03 List the advantages and disadvantages of business ownership.
 - 16.04 Identify the risks involved in ownership of a business.
 - 16.05 Identify the necessary personal characteristics of a successful entrepreneur.
 - 16.06 Identify the business skills needed to operate a small business efficiently and effectively.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Private Security Officer
Occupational Area: Public Service Occupations

Secondary

PSAV

Program Numbers	8918031	P430109
CIP Number	0743.010900	0743.010900
Grade Level	9-12, 30, 31	30, 31
Length	1 credit	150 hours
Certification	LAW ENF @7 G	LAW ENF @7 G
	PUB SERV @7 G	PUB SERV @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students as entry level security officers and for occupations that require security licensing in accordance with Florida Statute 493, such as doorkeepers (70100601), security checkers (70100605), and private security guards (371.667-034). This program also provides supplemental training for persons previously or currently employed in these occupations, and meets the requirements for issuance of a class "G" Armed Private Security Guard license.

The content includes, but is not limited to, criminal and civil law, security officer duties, patrol techniques, traffic control, loss prevention, investigation procedures, corporate and business security concerns, defensive tactics, first responder techniques, interpersonal skills, security duties in special circumstances, employability skills, computer literacy, basic fingerprinting and firearms training.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Through hands-on activities, the student will gain experience in apprehension and search of violators, maintenance and care of weapons and equipment, firearms training, inspection of vehicles, investigating incidents, patrol techniques, and defensive tactics. To accomplish these goals mock scenes and activities should be incorporated into the laboratory activities for secondary students. No secondary students should be involved in live fire situations.

On the firing range, the Criminal Justice Standards and Training Commission Policy Manual states that the teacher/student ratio must be no more than 1:6.

- III. **SPECIAL NOTE:** The American Society for Industrial Security is an appropriate organization for membership of postsecondary students. The organization develops leadership through workshop and educational programs, plus continuous updating on safety and security materials.

The minimum length of the postsecondary program for the average achieving students is 40 hours as required by Florida Statute 493.6303 (4)

Florida Public Service Association, is the appropriate vocational student organization for providing leadership training and reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040. F.A.C., a minimum basic skills grade level is required.

There are special requirements for employment as a security guard in a nuclear generating plant, hospitals, banks, retail stores, and others.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Demonstrate an understanding of entrepreneurship.
- 02.0 Perform basic duties of security officers.
- 03.0 Demonstrate interpersonal skills.
- 04.0 Demonstrate patrol techniques.
- 05.0 Perform traffic control.
- 06.0 Identify corporate and business security concerns.
- 07.0 Discuss loss prevention techniques.
- 08.0 Conduct a preliminary investigation.
- 09.0 Discuss criminal and civil law.
- 10.0 Use firearms in accordance with regulations set by Criminal Justice Standards and Training Commission.
- 11.0 Use defensive tactics and detain offenders.
- 12.0 Apply first responder techniques.
- 13.0 Demonstrate knowledge of blood borne pathogens, including AIDS and Hepatitis-B.
- 14.0 Conduct security duties in special circumstances.
- 15.0 Demonstrate computer literacy.
- 16.0 Take fingerprint standards and basic fingerprint latents.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Private Security Guard
Secondary Number: 8918031
Postsecondary Number: P430109

01.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:

- 01.01 Define entrepreneurship.
- 01.02 Describe the importance of entrepreneurship to the American economy.
- 01.03 List the advantages and disadvantages of business ownership.
- 01.04 Identify the risks involved in ownership of a business.
- 01.05 Identify the necessary personal characteristics of a successful entrepreneur.
- 01.06 Identify the business skills needed to operate a small business efficiently and effectively.

02.0 PERFORM BASIC DUTIES OF SECURITY OFFICERS--The student will be able to:

- 02.01 Identify industrial and business security including the types of security functions.
- 02.02 Identify security officer duties.
- 02.03 Detect and report security hazards.
- 02.04 Explain and test intrusion detection systems.
- 02.05 Perform perimeter control.
- 02.06 Perform access and egress control.
- 02.07 Search individuals.
- 02.08 Search for unauthorized materials.
- 02.09 Secure housing areas.
- 02.10 Coordinate security guard function with functions of another agency.
- 02.11 Use the telephone and mobile radio.

03.0 DEMONSTRATE INTERPERSONAL SKILLS--The student will be able to:

- 03.01 Identify theories and methods of human relations.
- 03.02 Demonstrate crisis intervention techniques by deescalating conflict and level of emotional impact.
- 03.03 Cooperate with local law enforcement agencies and personnel.

04.0 DEMONSTRATE PATROL TECHNIQUES--The student will be able to:

- 04.01 Explain and demonstrate observation techniques.
- 04.02 Patrol area on foot.
- 04.03 Patrol area in vehicle.
- 04.04 Make on-the-spot corrections of minor violations.

05.0 PERFORM TRAFFIC CONTROL--The student will be able to:

- 05.01 Identify state and corporate traffic enforcement regulations.

- 05.02 Identify traffic violations.
- 05.03 Control spectator traffic at special events.
- 05.04 Assist motorists using various methods.
- 05.05 Control traffic.

06.0 IDENTIFY CORPORATE AND BUSINESS SECURITY CONCERNS--The student will be able to:

- 06.01 Identify security concerns of banks, airports, hospitals, retail stores, restaurants and hotels, campuses, and nuclear generating plants.
- 06.02 Discuss industrial espionage.

07.0 DISCUSS LOSS/PREVENTION TECHNIQUES--The student will be able to:

- 07.01 Identify methods of loss and loss prevention.
- 07.02 Inventory merchandise during unloading.
- 07.03 Identify discrepancy between purchase order and actual delivery.
- 07.04 Identify discrepancy between cash register receipts and actual cash on hand.
- 07.05 Identify external theft.
- 07.06 Identify internal theft.

08.0 CONDUCT A PRELIMINARY INVESTIGATION--The student will be able to:

- 08.01 Describe investigation techniques and procedures.
- 08.02 Identify methods of undercover investigations.
- 08.03 Investigate minor offenses or incidents.
- 08.04 Investigate reported disturbances.
- 08.05 Conduct surveillance.
- 08.06 Identify basic principles and procedures of traffic accident investigations.
- 08.07 Reconstruct the accident.
- 08.08 Guard scene of accident or incident.
- 08.09 Apprehend and guard suspect at scene.
- 08.10 Identify and photograph evidence.
- 08.11 Record initial observations.

09.0 DISCUSS CRIMINAL AND CIVIL LAW--The student will be able to:

- 09.01 Identify constitutional laws and rights.
- 09.02 Identify criminal laws and procedures.
- 09.03 Discuss criminal and civil liability.
- 09.04 Discuss laws of evidence.
- 09.05 Explain search and seizures.
- 09.06 Discuss admissions and confessions.
- 09.07 Explain court rules and procedures.

10.0 USE FIREARMS IN ACCORDANCE WITH REGULATIONS SET BY CRIMINAL JUSTICE STANDARDS AND TRAINING COMMISSION--The student will be able to:

- 10.01 Discuss the legal aspects of firearms; explain effects and liabilities of use of force.

- 10.02 Define reasonable force and deadly force.
- 10.03 Use firearms in accordance with regulations set by Criminal Justice Standards and Training Commission.
- 10.04 Demonstrate proficiency in weapon use.
- 11.0 USE DEFENSIVE TACTICS AND DETAIN OFFENDERS--The student will be able to:
 - 11.01 Discuss liability in using defensive tactics.
 - 11.02 Use unarmed defensive tactics.
 - 11.03 Use impact instruments such as baton.
 - 11.04 Handcuff suspects.
 - 11.05 Control and detain offenders.
- 12.0 APPLY FIRST RESPONDER TECHNIQUES--The student will be able to:
 - 12.01 Identify health hazard and unsafe conditions.
 - 12.02 Demonstrate triage technique.
 - 12.03 Apply first responder techniques.
 - 12.04 Apply CPR technique.
- 13.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE PATHOGENS, INCLUDING AIDS AND HEPATITIS-B--The student will be able to:
 - 13.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens.
 - 13.02 Identify community resources and services available to individuals with diseases caused by blood borne pathogens.
 - 13.03 Identify at "risk behaviors" which promote the spread of AIDS and the public education necessary to combat the spread of diseases caused by blood borne pathogens.
 - 13.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
 - 13.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.
- 14.0 CONDUCT SECURITY DUTIES IN SPECIAL CIRCUMSTANCES--The student will be able to:
 - 14.01 Identify various emergency plans for special circumstances.
 - 14.02 Explain civil disturbances and protect property and people during disturbances.
 - 14.03 Identify disaster control procedures and guard destroyed areas to prevent looting.
 - 14.04 Identify methods of fire prevention, notify fire department and control fire.
 - 14.05 Identify bomb threats and conduct a bomb search.
 - 14.06 Assist in evacuation in case of bomb threat or fire.
 - 14.07 Identify threats of terrorism and methods of counter terrorism, and protect targeted people and property.
 - 14.08 Use appropriate weapons and tactics in special circumstances.
 - 14.09 Explain principles of executive protection, and create a protective circle.

15.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

- 15.01 Demonstrate computer literacy.
- 15.02 Run basic programs.
- 15.03 Discuss computer security.

16.0 TAKE FINGERPRINT STANDARDS AND BASIC FINGERPRINT LATENTS--The student will be able to:

- 16.01 Take fingerprint standards.
- 16.02 Take basic fingerprint latents.
- 16.03 Discuss basic fingerprint classification.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Public Administration Supervision
Occupational Area: Public Service Occupations

PSAV

Program Numbers P440401
CIP Number 0744.040101
Grade Level 30, 31
Length 1350 hours
Certification PUB ADM @7 G
PUB SERV @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as city planning aides (199.364-010), county administrative aides, public administration supervisors (industry title), personnel services managers (166.167-018) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, personnel administration, governmental organizations, law and legal aspects of public administration; regulations, public works administration, law enforcement administration, fiscal management, computer applications, principles of accounting, employability skills, leadership and human relations skills, and health and safety including CPR.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory activities are an appropriate component of this program. The internship method of instruction may be used, as well as apprenticeship method.
- III. **SPECIAL NOTE:** The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is:

Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

The typical length of this program for the average achieving student is 1350 hours.

This program/course should be reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Describe the organizational structure and management controls of a city, a county, a state.
- 02.0 Discuss the needs of the health department.
- 03.0 Describe the legislative processes of a city, county, and state.
- 04.0 Demonstrate knowledge of the tax base and structure.
- 05.0 Discuss planning versus crisis management.
- 06.0 State the mission of each public agency.
- 07.0 Demonstrate employability skills.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Public Administration Supervision
Secondary Number:
Postsecondary Number: P440401

01.0 DESCRIBE THE ORGANIZATIONAL STRUCTURE AND MANAGEMENT CONTROLS OF A CITY, A COUNTY, A STATE--The student will be able to:

- 01.01 Describe the three primary governing bodies of state government.
- 01.02 Identify and describe several major forms of city and/or county governments.
- 01.03 Describe the form of his/her city and county governments.
- 01.04 Identify the major elected and appointed officials of his/her city, county, and state and their respective roles.
- 01.05 Identify the means by which elected, appointed and public employees are selected.
- 01.06 Identify a selected number of career jobs related to city, county and state governments.
- 01.07 Identify and describe the services offered by city, county, and state governments.

02.0 DISCUSS THE NEEDS OF THE HEALTH DEPARTMENT--The student will be able to:

- 02.01 Demonstrate knowledge of solutions to air, water and food pollution.
- 02.02 Demonstrate knowledge of the health department's role in contagious disease control.
- 02.03 Describe model medical facilities and free clinics administered by health departments.

03.0 DESCRIBE THE LEGISLATIVE PROCESSES OF A CITY, COUNTY, AND STATE--The student will be able to:

- 03.01 Discuss the difference between unicameral and bicameral legislatures.
- 03.02 Discuss the requirements of legislators.
- 03.03 Discuss legislator's responsibilities.
- 03.04 Discuss ways in which the public can influence laws.
- 03.05 Discuss the content and purpose of state and local constitutions.

04.0 DEMONSTRATE KNOWLEDGE OF THE TAX BASE AND STRUCTURE--The student will be able to:

- 04.01 Discuss state, county, and city real, property and sales taxes.
- 04.02 Discuss engineering, permit, filing, licensure, motor vehicle, liquor, trailer and tobacco fees and taxes.
- 04.03 Discuss, franchise, gas and inheritance taxes.
- 04.04 Discuss special assessments levied to pay costs of improvements.

- 04.05 Discuss service charges and court fines as a source of revenue.
- 04.06 Discuss federal aid to states through grants-in-aid and revenue sharing.
- 04.07 Discuss methods of tax collection.

05.0 DISCUSS PLANNING VERSUS CRISIS MANAGEMENT--The student will be able to:

- 05.01 Discuss how crisis management subverts rather than deals with multi-dimensional problems.
- 05.02 Discuss how long range planning may threaten vested power interacts.
- 05.03 Discuss how coordination between agencies can improve trust and, in turn, planning.
- 05.04 Describe how crisis management at the top can lead to destructive handling of field problems.
- 05.05 Discuss how through long range planning a bureaucracy is better able to respond innovatively to system-wide problems.
- 05.06 Discuss the importance of dynamic organizational planning.

06.0 STATE THE MISSION OF EACH PUBLIC AGENCY--The student will be able to:

- 06.01 Discuss the transportation department's role in safety, highway management, aeronautics and waterway management.
- 06.02 Discuss health and welfare agencies' roles in domestic relations, veterans' benefits, the establishment of food and drug standards, and communicable disease control.
- 06.03 Discuss the role of public protection agencies in civil defense, law enforcement, fire prevention, safety, prisons, and courts.
- 06.04 Discuss the role of natural resource management in the maintenance of agriculture, forestry, parks, environment, and conservation.
- 06.05 Discuss the role of regulatory agencies in management of labor, banking, commerce, insurance, liquor, and public utilities.
- 06.06 Discuss the responsibilities of educational agencies in maintaining facilities, personnel, transportation and curriculum.
- 06.07 Discuss the role of planning and development agencies in managing resources, urban renewal, training and employment of the government's labor force.

07.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 07.01 Conduct a job search.
- 07.02 Secure information about a job.
- 07.03 Identify documents that may be required when applying for a job.
- 07.04 Complete a job application.
- 07.05 Demonstrate competence in job interview techniques.
- 07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 07.07 Identify acceptable work habits.
- 07.08 Demonstrate knowledge of how to make job changes appropriately.
- 07.09 Demonstrate acceptable employee health habits.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Public Administration Technology
Occupational Area: Public Service Occupations

PSV

CIP Number 0744.040100
Grade Level College Credits
Length AS Degree/64 Hours

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as city planning aides (199.364-010), county administrative aides, public administrators (166.167-018), personnel services managers (166.167-018) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, personnel administration, governmental organizations, law and legal aspects of public administration; regulations, public works administration, law enforcement administration, fiscal management, computer applications, principles of accounting, employability skills, leadership and human relations skills, and health and safety including CPR.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs is provided through vocational classroom instruction, college preparatory courses, and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory activities are an appropriate component of this program. The internship method of instruction may be used, as well as apprenticeship method.
- III. **SPECIAL NOTE:** The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

College level mathematics and communications courses are satisfactorily completed in the job preparatory program.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Describe the organizational structure and management controls of a city, a county, a state.
- 02.0 Demonstrate analytic managerial and decision making skills.
- 03.0 Describe the legislative processes of a city, county, and state.
- 04.0 Demonstrate knowledge of the tax base and structure.
- 05.0 Discuss planning versus crisis management.
- 06.0 State the mission of each public agency.
- 07.0 Demonstrate employability skills.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Public Administration Technology
Secondary Number:
Postsecondary Number: 0744.040100

01.0 DESCRIBE THE ORGANIZATIONAL STRUCTURE AND MANAGEMENT CONTROLS OF A CITY, A COUNTY, A STATE--The student will be able to:

- 01.01 Describe the three primary governing bodies of state government.
- 01.02 Identify and describe several major forms of city and/or county governments.
- 01.03 Describe the form of his/her city and county governments.
- 01.04 Identify the major elected and appointed officials of his/her city, county, and state and their respective roles.
- 01.05 Identify the means by which elected, appointed and public employees are selected.
- 01.06 Identify a selected number of career jobs related to city, county and state governments.
- 01.07 Identify and describe the services offered by city, county, and state governments.

02.0 DEMONSTRATE ANALYTIC MANAGERIAL AND DECISION MAKING SKILLS--The student will be able to:

- 02.01 Demonstrate a thorough knowledge of basic management principles, including but not limited to Unit of Command, Span of Control, Logical Assignment and Delegation of Authority.
- 02.02 Demonstrate a knowledge of management functions, including but not limited to organizing, planning, directing, controlling and coordination.
- 02.03 Demonstrate a knowledge of supervisory techniques and their applications.
- 02.04 Demonstrate a knowledge of human relations principles and skills.
- 02.05 Demonstrate a knowledge of leadership skills.
- 02.06 Demonstrate a knowledge of cost-consciousness and budgeting.
- 02.07 Demonstrate the ability to communicate with effectiveness orally and in writing.
- 02.08 Demonstrate the ability to solve computational problems effectively.
- 02.09 Demonstrate computer literacy.
- 02.10 Demonstrate the ability to train subordinates.

03.0 DESCRIBE THE LEGISLATIVE PROCESSES OF A CITY, COUNTY, AND STATE--The student will be able to:

- 03.01 Discuss the difference between unicameral and bicameral legislatures.
- 03.02 Discuss the requirements of legislators.
- 03.03 Discuss legislator's responsibilities.

- 03.04 Discuss ways in which the public can influence laws.
- 03.05 Discuss the content and purpose of state and local constitutions/charters.
- 04.0 DEMONSTRATE KNOWLEDGE OF THE TAX BASE AND STRUCTURE--The student will be able to:
 - 04.01 Discuss state, county, and city real, property and sales taxes.
 - 04.02 Discuss engineering, permit, filing, licensure, motor vehicle, liquor, trailer and tobacco fees and taxes.
 - 04.03 Discuss, franchise, gas and inheritance taxes.
 - 04.04 Discuss special assessments levied to pay costs of improvements.
 - 04.05 Discuss service charges and court fines as a source of revenue.
 - 04.06 Discuss federal aid to states through grants-in-aid and revenue sharing.
 - 04.07 Discuss methods of tax collection.
- 05.0 DISCUSS PLANNING VERSUS CRISIS MANAGEMENT--The student will be able to:
 - 05.01 Discuss how crisis management subverts rather than deals with multi-dimensional problems.
 - 05.02 Discuss how long range planning may threaten vested power interests.
 - 05.03 Discuss how coordination between agencies can improve trust and, in turn, planning.
 - 05.04 Describe how crisis management at the top can lead to destructive handling of field problems.
 - 05.05 Discuss how through long range planning a bureaucracy is better able to respond innovatively to system-wide problems.
 - 05.06 Discuss the importance of dynamic organizational planning.
- 06.0 STATE THE MISSION OF EACH PUBLIC AGENCY--The student will be able to:
 - 06.01 Discuss the transportation department's role in safety, highway management, aeronautics and waterway management.
 - 06.02 Discuss health and welfare agencies' roles in domestic relations, veterans' benefits, the establishment of food and drug standards, and communicable disease control.
 - 06.03 Discuss the role of public protection agencies in civil defense, law enforcement, fire prevention, safety, prisons, and courts.
 - 06.04 Discuss the role of natural resource management in the maintenance of agriculture, forestry, parks, environment, and conservation.
 - 06.05 Discuss the role of regulatory agencies in management of labor, banking, commerce, insurance, liquor, and public utilities.
 - 06.06 Discuss the responsibilities of educational agencies in maintaining facilities, personnel; transportation and curriculum.
 - 06.07 Discuss the role of planning and development agencies in managing resources, urban renewal, training and employment of the government's labor force.

07.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 07.01 Conduct a job search.
- 07.02 Secure information about a job.
- 07.03 Identify documents that may be required when applying for a job.
- 07.04 Complete a job application.
- 07.05 Demonstrate competence in job interview techniques.
- 07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 07.07 Identify acceptable work habits.
- 07.08 Demonstrate knowledge of how to make job changes appropriately.
- 07.09 Demonstrate acceptable employee health habits.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Public Safety Telecommunication
Occupational Area: Public Service Occupations

PSAV

Program Numbers P090101
CIP Number 0709.080100
Grade Level 30, 31
Length 150 hours
Certification LAW ENF @7 G
FIRE FIGHT @7 G
CORR OFF @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as dispatcher: police, fire, ambulance (58002345) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, ethics and the role of the telecommunicator; standard telecommunication operating procedures; relationship to field personnel; understanding of command levels; typical layouts of message centers; use of performance aids; overview of emergency agencies; functions and terminology; use of correct words and grammar; communications equipment; functions, and terminology; types of telecommunication equipment; malfunctions and maintenance agreements; proper and correct telephone and dispatching procedures and techniques; cooperation and reciprocal agreements with other agencies; federal, state, and local communication rules; emergency situations and operating procedures; employability skills; leadership and human relations skills; and health and safety including CPR. This program focuses on broad, transferrable skills and stresses understanding and demonstration of the following elements of the agricultural industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** The program objectives and outcomes will be enhanced if the student has the opportunity to achieve actual experience in utilization of some telecommunications equipment such as telephone, teletype and radio dispatch console.

- III. **SPECIAL NOTE:** Institutions offering this type of program are encouraged to build a communications training simulator and incorporate same into their program content.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 11.0, Reading 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 150 hours.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Describe and demonstrate professional ethics and the role of telecommunicator.
- 02.0 Describe and operate communication hardware and equipment.
- 03.0 Perform operational skills.
- 04.0 Demonstrate communication skills.
- 05.0 Demonstrate human relations and leadership skills.
- 06.0 Describe Florida criminal law and its application to telecommunication operation.
- 07.0 Handle stress as related to job.
- 08.0 Demonstrate employability skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Public Safety Telecommunication
Secondary Number:
Postsecondary Number: P090101

01.0 DESCRIBE AND DEMONSTRATE PROFESSIONAL ETHICS AND THE ROLE OF TELECOMMUNICATOR--The student will be able to:

- 01.01 Describe professional ethics and moral responsibilities of telecommunicator to the public.
- 01.02 Demonstrate professional behavior.

02.0 DESCRIBE AND OPERATE COMMUNICATION HARDWARE AND EQUIPMENT--The student will be able to:

- 02.01 Describe typical layouts of communication centers.
- 02.02 Identify communication equipment functions and terminology.
- 02.03 Describe function of computer-aided dispatch and 911.
- 02.04 Explain functions of Florida Communication Information Center (FCIC) and National Communication Information Center (NCIC).
- 02.05 Operate telephone and radio equipment.
- 02.06 Operate 911 equipment.
- 02.07 Operate dispatch console.
- 02.08 Operate computer terminal.

03.0 PERFORM OPERATIONAL SKILLS--The student will be able to:

- 03.01 Identify formats in FCIC and NCIC.
- 03.02 Obtain information for dispatch.
- 03.03 Organize information.
- 03.04 Compile information on proper forms, logs, and files.
- 03.05 Disseminate information from FCIC and NCIC.
- 03.06 Use proper performance aids and resources.
- 03.07 Follow standard procedures in emergency and normal dispatch.
- 03.08 Adhere to federal, state, and local laws when dispensing information.

04.0 DEMONSTRATE COMMUNICATION SKILLS--The student will be able to:

- 04.01 Use calm and controlled voice on radio and phone.
- 04.02 Use telephone courtesy.
- 04.03 Dispatch and talk on phone simultaneously.
- 04.04 Calm potential emergencies.
- 04.05 Make an acceptable conclusion in routine situations.
- 04.06 Perceive situations as they really are.
- 04.07 Use proper pronunciation.

05.0 DEMONSTRATE HUMAN RELATIONS AND LEADERSHIP SKILLS--The student will be able to:

- 05.01 Give and follow instructions.

- 05.02 Handle emotional people in calls.
- 05.03 Control personal feelings.
- 05.04 Follow chain of command.
- 05.05 Lead other party to positive outcome by taking charge of situation.
- 05.06 Make decision and assist other in decision making.

06.0 DESCRIBE FLORIDA CRIMINAL LAW AND ITS APPLICATION TO TELECOMMUNICATION OPERATION--The student will be able to:

- 06.01 Describe Florida criminal law.
- 06.02 Explain how the criminal law affects and applies to the operation of telecommunication.
- 06.03 Classify the calls using the proper legal terms.
- 06.04 Determine the intensity of the call.
- 06.05 Determine if a crime has been committed.
- 06.06 Refer the caller to proper social agency if crime is not involved.

07.0 HANDLE STRESS AS RELATED TO JOB--The student will be able to:

- 07.01 Identify when symptoms of stress begin.
- 07.02 Identify results of stress.
- 07.03 Avoid stressful situations.
- 07.04 React to stressful situations.
- 07.05 Perform activities to relieve stress.

08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 08.01 Conduct a job search.
- 08.02 Secure information about a job.
- 08.03 Identify documents that may be required when applying for a job.
- 08.04 Complete a job application.
- 08.05 Demonstrate competence in job interview techniques.
- 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 08.07 Identify acceptable work habits.
- 08.08 Demonstrate knowledge of how to make job changes appropriately.
- 08.09 Demonstrate acceptable employee health habits.

**Florida Department of Education
CURRICULUM FRAMEWORK**

Program Title: Public Service Cooperative Education - OJT
Occupational Area: Public Service

Secondary

PSAV

Program Numbers	8900410	P439999
CIP Number	0743.9999CP	0743.9999CP
Grade Level	9-12, 30, 31	30, 31
Length	Multiple credits	Multiple hours
Certification	ANY PUBLIC SERV	ANY PUBLIC SERV
	OCC ED G	OCC ED G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this course is to provide the on-the-job training component when the cooperative method of instruction is used to prepare students for employment in public service occupations. On-the-job experiences are provided as a part of a job preparatory program which will develop occupational competencies required for employment in the occupation chosen by the student as a career choice or to provide experiences that further develop the competencies acquired by the student in an in-school job preparatory program. This method of delivery is not intended for supplemental vocational course instruction and shall not be claimed for supplemental FTE purposes.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** A work station is provided as required to support the on-the-job training activities of the student.
- III. **SPECIAL NOTE:** Florida Public Service Association, is the appropriate vocational student organization for providing leadership training and reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

For the on-the-job training component, the following is required for each student: a training plan, signed by the student, teacher and employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed. The teacher/coordinator must visit

each job site a minimum of once during each grading period for the purpose of evaluating the student's progress in attaining the competencies listed in the training plan.

The Cooperative - OJT course may be taken by a student for one or more semesters. A student may earn multiple credits in this course. The specific student performance standards which the student must achieve to earn credit must be specified in the OJT training plan.

- IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

- 01.0 Perform designated job skills.
- 02.0 Demonstrate work ethic.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Public Service Cooperative Education - OJT
Secondary Number: 8900410
Postsecondary Number: P439999

01.0 PERFORM DESIGNATED JOB SKILLS--The student will be able to:

- 01.01 Perform tasks as outlined in the training plan.
- 01.02 Demonstrate job performance skills.
- 01.03 Demonstrate safety procedures on the job.
- 01.04 Maintain appropriate records.
- 01.05 Attain an acceptable level of productivity.
- 01.06 Demonstrate appropriate dress and grooming habits.
- 01.07 Recognize limits of authority and responsibility.
- 01.08 Identify rights and responsibilities.
- 01.09 Identify legal ramifications of actions/inactions in the job area.
- 01.10 Recognize and value time.
- 01.11 Recognize and value accuracy.

02.0 DEMONSTRATE WORK ETHICS--The student will be able to:

- 02.01 Follow directions.
- 02.02 Demonstrate good human relations skills on the job.
- 02.03 Demonstrate good work habits.
- 02.04 Demonstrate acceptable business ethics.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Public Service Education Directed Study
Occupational Area: Public Service Occupations

Secondary

Program Numbers 8900100
CIP Number 0743.999910
Grade Level 9-12, 30, 31
Length Multiple credits
Certification ANY PUBLIC SERV OCC ED G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this course is to provide students with additional competencies in a Public Service Education program that will enhance their opportunities for employment in the occupation chosen by the student. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

The content is prescribed by the instructor based upon the individual student's assessed needs for directed study.

- II. **LABORATORY ACTIVITIES:** A work station is provided as required to support the training activities of the student.
- III. **SPECIAL NOTE:** Florida Public Service Association, is the appropriate vocational student organization for providing leadership training and reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

The specific student performance standards which the student must master to earn credit must be outlined in an instructional plan developed by the instructor.

The student enrolled in this course must be reported using the Course Code Directory program number for the specific job preparatory program in which the student is continuing.

- IV. **INTENDED OUTCOMES:** After successfully completing this course, the student will be able to:
- 01.0 Perform designated job skills.
 - 02.0 Demonstrate a knowledge of the basic skills in mathematics and language appropriate for the chosen occupation.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

July 1997

Program Title: Public Service Education Directed Study
Secondary Number: 8900100
Postsecondary Number:

- 01.0 PERFORM DESIGNATED JOB SKILLS--The student will be able to:
- 01.01 Demonstrate job performance skills.
 - 01.02 Follow prescribed safety procedures.
 - 01.03 Display increasingly higher levels of productivity.
- 02.0 DEMONSTRATE A KNOWLEDGE OF THE BASIC SKILLS IN MATHEMATICS AND LANGUAGE APPROPRIATE FOR THE CHOSEN OCCUPATION--The student will be able to:
- 02.01 Use addition, subtraction, multiplication, and division to solve problems encountered in the chosen occupation.
 - 02.02 Read, understand, and find information relative to the chosen occupation.
 - 02.03 Write logical and grammatically correct statements and reports with correct spelling appropriate for the chosen occupation.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Recreation Technology
Occupational Area: Public Service Occupations

PSV

CIP Number 0736.019901
Grade Level College Credits
Length AS Degree/64 Hours

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as recreation leaders (195.227-014), recreation supervisors (187.137-010), group recreation workers (10243201), or recreation facility attendants (70080401) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, history, philosophy, and scope of recreation; techniques of community organization and the interrelatedness of special agencies and institutions; team sports; social recreation and music recreation; indoor and outdoor sports; recreation organization, supervision, and planning; general psychology; group dynamics; employability skills; leadership and human relations skills; and health and safety,

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities are essential for this program. Access to sports facilities and equipment is required.

- III. **SPECIAL NOTE:** Clinical practicums in several recreation areas, both indoor and outdoor, are effective teaching/learning strategies.

The typical length of this program for the average achieving student is and associate degree.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

01.0 Teach individuals and groups to participate in sports, including golf, badminton, bowling, archery, and tennis.

- 02.0 Organize large group activities such as basketball, football, volleyball, track and softball.
- 03.0 Lead group activities in a social setting.
- 04.0 Recognize broad needs of special groups of handicapped and adapt, modify, or design special activities for them.
- 05.0 Demonstrate knowledge of outdoor recreation conservation, organized camping, outdoor education, and camp craft skills.
- 06.0 Demonstrate employability skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Recreation Technology
Secondary Number:
Postsecondary Number: 0736.019901

01.0 TEACH INDIVIDUALS AND GROUPS TO PARTICIPATE IN SPORTS, INCLUDING GOLF, BADMINTON, BOWLING, ARCHERY, AND TENNIS--The student will be able to:

- 01.01 Design programs, services, and strategies to educate the public for leisure.
- 01.02 Use library resources for recreation and leisure information.
- 01.03 Discuss the philosophical, social, and behavioral foundations of leisure.
- 01.04 Display knowledge of rules of golf, badminton, bowling, archery, and tennis.
- 01.05 Use basic terminology of the sports identified in 01.04, define each word.
- 01.06 Prepare a plan for a tournament for each of the sports identified in 01.04.
- 01.07 Organize a golf tournament for 10 participants identifying playoffs for place.
- 01.08 Organize a tennis doubles tournament for 6 teams.
- 01.09 Conduct classroom instruction to teach rules of each game to interested participants.
- 01.10 Use standard teaching methods including demonstration, practice and observation.
- 01.11 Teach safety precautions for all age groups.
- 01.12 List publicity and public relations activities.

02.0 ORGANIZE LARGE GROUP ACTIVITIES SUCH AS BASKETBALL, FOOTBALL, VOLLEYBALL, TRACK AND SOFTBALL--The student will be able to:

- 02.01 Prepare an itinerary which includes site selection and transportation plans for each group member.
- 02.02 Discuss "contingency" plans for transportation.
- 02.03 Organize a special Olympics basketball game.
- 02.04 Plan a track meet: select players and location.
- 02.05 Discuss the history of team sports and trace components back to ancient Greece.
- 02.06 Discuss the development of leisure activities and tell how these activities meet the needs of individuals in today's society.
- 02.07 Explain the term "sports medicine" and list the major concepts.
- 02.08 Organize a jazzercise session for 25 persons in an adult group.

03.0 LEAD GROUP ACTIVITIES IN A SOCIAL SETTING--The student will be able to:

- 03.01 Define group dynamics theory and give examples of application of theory.
- 03.02 Discuss the benefits of group activities.
- 03.03 Organize a bridge (card) party for four tables.

- 03.04 Lead a sing-a-long group.
 - 03.05 Select a site and organize a club picnic giving a contingency plan.
 - 03.06 Decide upon appropriate games, nature hikes, or other amusement for the club members using member participation in the planning decisions.
 - 03.07 Prepare a national park recreation director's job description listing the group activities that must be planned for, organized and implemented, making certain to include all necessary safety precautions.
 - 03.08 Design a dramatic sketch and role play it.
 - 03.09 Keep records and reports including participant evaluations.
- 04.0 RECOGNIZE BROAD NEEDS OF SPECIAL GROUPS OF HANDICAPPED AND ADAPT, MODIFY, OR DESIGN SPECIAL ACTIVITIES FOR THEM--The student will be able to:
- 04.01 Visit a facility for disabled individuals and identify the social, recreational and physical therapy needs of this group.
 - 04.02 Organize a swim competition for disabled individuals.
 - 04.03 Visit the school classroom at a facility for disabled individuals and list the teaching modifications for each student.
 - 04.04 Organize a special Olympics meet for the disabled.
 - 04.05 Organize a shuffleboard meet for disabled individuals.
 - 04.06 Describe the aging process and explain the implications for planning, organizing and delivering leisure services for mature adults.
 - 04.07 Assess leisure needs, interests, and desires of the different age groups including the disabled.
 - 04.08 List the anatomical terms associated with disabilities and describe the altered physiology for each term.
 - 04.09 List the voluntary organizations which serve the recreational needs of society, including the handicapped and disabled.
- 05.0 DEMONSTRATE KNOWLEDGE OF OUTDOOR RECREATION, CONSERVATION, ORGANIZED CAMPING, OUTDOOR EDUCATION, AND CAMP CRAFT SKILLS--The student will be able to:
- 05.01 Select an appropriate site for a camping expedition for a senior citizen group.
 - 05.02 Select an appropriate camp site for a scout troop.
 - 05.03 List the outdoor recreations for the following age groups: preschool, ages 6-12, teen ages, young adults, mature adults.
 - 05.04 List the hazards which are common to Florida outdoors.
 - 05.05 List the first aid equipment needed for each of the outdoor recreational activities listed in 05.03.
 - 05.06 List the conservation techniques appropriate to 05.03.
 - 05.07 List the activities for which the municipal recreation supervisor is responsible.
 - 05.08 Describe camp crafts, nature education and water sports and list the safety factors for each.

06.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 06.01 Conduct a job search.
- 06.02 Secure information about a job.
- 06.03 Identify documents that may be required when applying for a job.
- 06.04 Complete a job application.
- 06.05 Demonstrate competence in job interview techniques.
- 06.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 06.07 Identify acceptable work habits.
- 06.08 Demonstrate knowledge of how to make job changes appropriately.
- 06.09 Demonstrate acceptable employee health habits.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Sign Language Communication
Occupational Area: Public Service Occupations

PSAV

Program Numbers P131023
CIP Number 0713.100302
Grade Level 30, 31
Length 150 hours
Certification ANY FIELD

- I. **MAJOR CONCEPTS/CONTENT:** This program is designed to prepare students for employment as signer/communicator for the hearing impaired or to provide supplemental training for persons previously or currently employed in these and allied occupations such as nursing, education and human service agencies, etc. (Industry Title).

The content includes but is not limited to: components of sign language, including sign vocabulary, fingerspelling, facial expression and body movement; orientation to the various manual systems of communication; Aspects of American Sign Language (ASL); orientation to the cultural aspects of deafness; educational implications; rehabilitation implications; organizations of and for deaf persons. Employability skills are included.

Reinforcement of basic skills in English, mathematics science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory experience is an integral part of this program. Laboratory experiences should be provided, utilizing a variety of instructional media for the purpose of developing expressive and receptive signing skills. Students may be assigned additional hours of contact with and observations of hearing impaired consumers in a variety of settings, e.g. social organizations, educational programs, and human service agencies.

- III. **SPECIAL NOTE:** The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program: Mathematics 8.0, Language 11.0, Reading 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 150 hours.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Demonstrate knowledge of the Sign Language systems continuum.
- 02.0 Demonstrate the ability to use expressive and receptive signing skills in basic conversation.
- 03.0 Demonstrate the ability to use expressive and receptive fingerspelling in basic conversation.
- 04.0 Demonstrate knowledge of aspects of American Sign Language.
- 05.0 Demonstrate knowledge of the cultural aspects of deafness.
- 06.0 Demonstrate knowledge of the implications of hearing loss for education and social development.
- 07.0 Demonstrate employability skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Sign Language Communication
Secondary Number:
Postsecondary Number: P131023

- 01.0 DEMONSTRATE KNOWLEDGE OF THE SIGN LANGUAGE SYSTEMS CONTINUUM--The student will be able to:
- 01.01 Describe the concept of the sign language continuum.
 - 01.02 Identify the placement of the various sign language systems along the continuum.
 - 01.03 Identify the components of various forms of manually-coded English e.g. PSE, SEE (Pedgir Signed English, Signing Exact English).
 - 01.04 Compare and contrast forms of manually-coded English with American Sign Language.
 - 01.05 Be able to demonstrate the various aspects of manually-coded English.
- 02.0 DEMONSTRATE THE ABILITY TO USE EXPRESSIVE AND RECEPTIVE SIGNING SKILLS IN BASIC CONVERSATION--The student will be able to:
- 02.01 Demonstrate the appropriate use of facial expression, body movement and the use of space in sign communication.
 - 02.02 Recognize and produce a minimum vocabulary of 500 standard signs.
 - 02.03 Demonstrate ability to use acquired sign vocabulary to communicate effectively in basic conversation.
- 03.0 DEMONSTRATE THE ABILITY TO USE EXPRESSIVE AND RECEPTIVE FINGERSPELLING IN BASIC CONVERSATION--The student will be able to:
- 03.01 Fingerspell the manual alphabet.
 - 03.02 Recognize simple fingerspelled words.
 - 03.03 Explain the concept of loan signs and demonstrate examples.
 - 03.04 Demonstrate ability to convert from one to one hundred using the manual numbering system.
- 04.0 DEMONSTRATE KNOWLEDGE OF ASPECTS OF AMERICAN SIGN LANGUAGE--The student will be able to:
- 04.01 Employ appropriate facial expression and body movement in sign communication.
 - 04.02 Demonstrate the concepts of time, use of space and verb directionality in sign communication.
- 05.0 DEMONSTRATE KNOWLEDGE OF THE CULTURAL ASPECTS OF DEAFNESS--The student will be able to:
- 05.01 Describe the social activities and organizations of the deaf community.

- 05.02 Describe behavioral characteristics (and social patterns) that are common in members of the deaf community.
- 05.03 Assistive devices for hearing impaired: telecommunication devices for the deaf, closed captioning, signaling devices.

06.0 DEMONSTRATE KNOWLEDGE OF THE IMPLICATIONS OF HEARING LOSS FOR EDUCATION AND SOCIAL DEVELOPMENT--The student will be able to:

- 06.01 Describe degrees of hearing loss and age of onset in terms of their impact on educational and social development.
- 06.02 Describe various types of educational programs available to hearing impaired individuals.
- 06.03 Identify social services and agencies which are available to hearing impaired individuals.
- 06.04 Be familiar with the myths associated with deafness and hearing impaired people.

07.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 07.01 Conduct a job search.
- 07.02 Secure information about a job.
- 07.03 Identify documents that may be required when applying for a job.
- 07.04 Complete a job application.
- 07.05 Demonstrate competence in job interview techniques.
- 07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 07.07 Identify acceptable work habits.
- 07.08 Demonstrate knowledge of how to make job changes appropriately.
- 07.09 Demonstrate acceptable employee health habits.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Social Services Technology
Occupational Area: Public Service Occupations

PSV

CIP Number 0744.070100
Grade Level College Credits
Length AS Degree/62 Hours

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as welfare investigators (industry title), community organization workers (10243405), eligibility workers; welfare (53502301), service aides (industry title), welfare social workers (195.107-034), welfare directors (118.117-126), or community organization workers (195.167-010) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, social problems, child psychology, race relations, marriage and the family, the city, interviewing techniques, juvenile delinquency and crime, social welfare as an institution, community organizations, promoting social change, group dynamics, sociology, technical writing, employability skills, leadership and human relations skills, and health and safety including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities are used to reinforce classroom activities and are essential for health, safety, and CPR.
- III. **SPECIAL NOTE:** Florida Public Service Association, is the appropriate vocational student organization for providing leadership training and reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the

instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; (2) a work station which reflects equipment, skills and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Interview clients.
- 02.0 Recognize deviant behavior and select corrective measures.
- 03.0 Use self in a helping intervention relationship.
- 04.0 Perform group therapy sessions.
- 05.0 Identify causes of disruptive behavior.
- 06.0 Write incident reports.
- 07.0 Promote social change.
- 08.0 Demonstrate employability skills.
- 09.0 Demonstrate community referral.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Social Services Technology
Secondary Number:
Postsecondary Number: 0744.070100

01.0 INTERVIEW CLIENTS--The student will be able to:

- 01.01 Practice confidentiality.
- 01.02 Demonstrate knowledge of clients' right to privacy.
- 01.03 Record statistical data.
- 01.04 Record personal and psychological history.
- 01.05 Elicit and record client complaints.
- 01.06 Demonstrate skills in client interviewing.

02.0 RECOGNIZE DEVIANT BEHAVIOR AND SELECT CORRECTIVE MEASURES--The student will be able to:

- 02.01 Demonstrate knowledge of symptoms of manic and depressed behavior.
- 02.02 Demonstrate knowledge of manipulative, self-destructive, combative, complaining and regressed behavior.
- 02.03 Demonstrate knowledge of aggressive, passive and paradoxical lifestyles developed in response to stress.
- 02.04 Demonstrate knowledge of unhealthy reactions to stress.
- 02.05 Select corrective measures of deviant behavior based on environmental, behavioral modification, activity or educational therapy.

03.0 USE SELF IN A HELPING INTERVENTION RELATIONSHIP--The student will be able to:

- 03.01 Demonstrate the ability to accept and assume responsibility for his/her own behavior.
- 03.02 Demonstrate physical and emotional health.
- 03.03 Demonstrate evidence of security and flexibility.
- 03.04 Demonstrate the ability to postpone gratification of needs.
- 03.05 Foster client independence.
- 03.06 Recognize, accept and modify his/her impact on others.

04.0 PERFORM GROUP THERAPY SESSIONS--The student will be able to:

- 04.01 With group participation, establish ground rules and establish group goals.
- 04.02 Promote healthy social interaction and peer identification.
- 04.03 Act as role model and facilitator.
- 04.04 Encourage individuals to assume responsibility for their own behavior.
- 04.05 As facilitator, promote free exchange of ideas and shared feelings.
- 04.06 Demonstrate an understanding of the group stage.
- 04.07 Demonstrate an understanding of role functions in the group.

- 05.0 IDENTIFY CAUSES OF DISRUPTIVE BEHAVIOR--The student will be able to:
- 05.01 Demonstrate knowledge of basic human needs and the consequences of deprivation of these needs.
 - 05.02 Demonstrate knowledge of intrapersonal and interpersonal communication.
 - 05.03 Demonstrate knowledge of transactional analysis.
 - 05.04 Demonstrate knowledge of hereditary and environmental factors on growth and development.
 - 05.05 Demonstrate knowledge of sources of stress and attendant socially acceptable coping methods.
- 06.0 WRITE INCIDENT REPORTS--The student will be able to:
- 06.01 Identify the problem.
 - 06.02 Record name of informant and chief complaint.
 - 06.03 Describe formulation of decision to interview.
 - 06.04 Describe implementation of selected plan of action.
 - 06.05 Describe resolution of incident.
 - 06.06 Describe anticipatory planning for future use.
- 07.0 PROMOTE SOCIAL CHANGE--The student will be able to:
- 07.01 Demonstrate knowledge of sociological factors which impinge on the individual, family, and community.
 - 07.02 Encourage individual to change from a dependent, demanding, receiving infant to an independent, cooperative adult.
 - 07.03 Demonstrate use of appropriate coping methods.
 - 07.04 Encourage the acquisition of emotional maturity and mental health.
- 08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 08.01 Conduct a job search.
 - 08.02 Secure information about a job.
 - 08.03 Identify documents that may be required when applying for a job.
 - 08.04 Complete a job application.
 - 08.05 Demonstrate competence in job interview techniques.
 - 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 08.07 Identify acceptable work habits.
 - 08.08 Demonstrate knowledge of how to make job changes appropriately.
 - 08.09 Demonstrate acceptable employee health habits.
- 09.0 DEMONSTRATE COMMUNITY REFERRAL--The student will be able to:
- 09.01 Demonstrate knowledge of community resources.
 - 09.02 Identify appropriate agencies for referrals.
 - 09.03 Conduct an agency referral to include appropriate written and verbal information.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Solid Waste Disposal Operation
Occupational Area: Public Service Occupations

PSAV

Program Numbers P440699
CIP Number 0744.060100
Grade Level 30, 31
Length 140 hours
Certification WASTE MGMT G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as land fill managers (industry title), or to provide supplemental training for persons previously or currently employed in these occupations. The program is designed to prepare students to be trained operators of solid waste landfills in accordance with Chapter 17-703, F.A.C., as approved by the Florida Department of Environmental Protection. The program is currently offered at a fundamental level of training and is structured to present information about landfill design, how landfills perform during operation and closure, the potential impact on environmental quality, and operational techniques.

The program content includes, the role of sanitary landfills in municipal solid waste management, mathematics for landfill operations, state regulations, proposed federal regulations; waste acceptance at the site, basics of site selection, waste decomposition, landfill economics, control processes for landfill gas and leachate; complying with permit requirements, operational techniques; and site closure and post closure considerations.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Students are introduced to control processes for landfill gas and leachate; and groundwater monitoring parameters, techniques, and equipment. Analytical laboratory procedures are not included in this program.
- III. **SPECIAL NOTE:** The educational institution that conducts the training course issues a verification of training document to all students who have a high school diploma or equivalent, the required work experience and successfully complete the operator training course and pass the required examination.

In accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is:

Mathematics 10.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

Instructors and speakers involved in solid waste management are important contributors to the program. The typical length of the program for the average achieving student is 140 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Identify the basic characteristics of solid waste treatment.
- 02.0 Comply with Department of Environmental Protection rules and relevant state and federal statutes and local ordinances.
- 03.0 Perform mathematic calculations related to landfill operations.
- 04.0 Describe process of waste acceptance on site.
- 05.0 Describe the basics of site selection.
- 06.0 Describe the process of waste decomposition as it relates to waste management.
- 07.0 Participate in the analysis of a case study which details the economics of sanitary landfills.
- 08.0 Describe control processes for landfill gas and leachate.
- 09.0 Demonstrate knowledge of design requirements for sanitary landfills.
- 10.0 Demonstrate knowledge of standard operational techniques for sanitary landfills.
- 11.0 Demonstrate knowledge of the various types of equipment used in sanitary landfills.
- 12.0 Demonstrate knowledge of site closure methods and post-closure considerations.
- 13.0 Participate in field exercise which will familiarize the student with existing real life conditions prevalent in a sanitary landfill.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Solid Waste Disposal Operation
Secondary Number:
Postsecondary Number: P440699

01.0 IDENTIFY THE BASIC CHARACTERISTICS OF SOLID WASTE TREATMENT--The student will be able to:

- 01.01 Define solid waste.
- 01.02 List sources of solid waste.
- 01.03 Identify types of solid waste.
- 01.04 Identify physical and chemical compositions of waste.
- 01.05 Correlate typical source with locations and type of solid waste.
- 01.06 Describe landfill alternatives (reduction, separation, processing, waste to energy).
- 01.07 Describe characteristics of a sanitary landfill.
- 01.08 List the three most significant reactions that occur as a landfill matures.
- 01.09 List characteristics of hazardous waste.

02.0 COMPLY WITH DEPARTMENT OF ENVIRONMENTAL REGULATION RULES AND RELEVANT STATE AND FEDERAL STATUTES AND LOCAL ORDINANCES--The student will be able to:

- 02.01 Demonstrate knowledge of the 1976 Resource Conservation and Recovery Act (RCRA) as amended 1984 [Vol. 53 No. 168 p. 33405 Federal Register].
- 02.02 List characteristics of an effective monitoring program.
- 02.03 Demonstrate knowledge of Florida Resource Recovery and Management Act of 1988 [Chapter 88-130 F.S.].
- 02.04 Demonstrate knowledge of permit requirements as it relates to leachate production and control.
- 02.05 Demonstrate knowledge of permit requirements as they relate to vector control, landfill gas and settlement.
- 02.06 Identify techniques for responding to site inspection under relevant rules and statutes.
- 02.07 Demonstrate knowledge of construction/demolition disposal techniques under relevant rules and statutes.
- 02.08 Demonstrate knowledge of tire processing/storage under relevant rules and statutes.

03.0 PERFORM MATHEMATIC CALCULATIONS RELATED TO LANDFILL OPERATIONS--The student will be able to:

- 03.01 Convert such readings to real distance using a set of plans drawn to scale within a reasonable period of time.
- 03.02 Calculate the area of a square, rectangle and trapezoid within a reasonable period of time.
- 03.03 Demonstrate the ability to read and understand slopes.

- 03.04 Calculate the volume of a square, rectangular and trapezoidal figure within a reasonable period of time.
- 04.0 DESCRIBE PROCESS OF WASTE ACCEPTANCE ON SITE--The student will be able to:
- 04.01 Identify wastes which are not acceptable to be put in the landfill.
 - 04.02 Demonstrate appropriate action which would prevent unacceptable waste from entering the landfill.
 - 04.03 Develop a plan to identify and manage the parts of the waste stream.
 - 04.04 List factors which determine waste acceptability.
 - 04.05 Define hazardous waste.
 - 04.06 Identify liquids which may be excluded from landfill.
 - 04.07 Describe management options for lead acid batteries, used oil, sludges and infectious waste.
 - 04.08 Define radioactive waste.
 - 04.09 Describe operational/equipment limitations which would prevent materials from going into the landfill and disposal options.
- 05.0 DESCRIBE THE BASICS OF SITE SELECTION--The student will be able to:
- 05.01 List typical factors which may restrict or eliminate a potential location from consideration as a future landfill site.
 - 05.02 List regulations which may further restrict or eliminate a potential location from consideration.
- 06.0 DESCRIBE THE PROCESS OF WASTE DECOMPOSITION AS IT RELATES TO WASTE MANAGEMENT--The student will be able to:
- 06.01 List categories of waste by method of decomposition and by products created.
 - 06.02 List factors which effect the rate of decomposition.
 - 06.03 List three events which will occur in a landfill as a result of decomposition.
 - 06.04 Define subsidence.
 - 06.05 Define differential settlement.
 - 06.06 Describe settlement control and how to determine whether settlement is occurring.
 - 06.07 Define landfill gas operation.
 - 06.08 Describe composition of landfill gas and gas generation cycle.
 - 06.09 Define landfill gas migration.
 - 06.10 List items that intercept migration routes.
 - 06.11 Describe techniques for recognition and control of landfill migration.
 - 06.12 Define leachate generation.
 - 06.13 List characteristics of leachate and describe leachate impact.
 - 06.14 List controlling factors in establishing leachate quality.
- 07.0 PARTICIPATE IN THE ANALYSIS OF A CASE STUDY WHICH DETAILS THE ECONOMICS OF SANITARY LANDFILLS--The student will be able to:

- 07.01 List expenses for a landfill.
- 07.02 Describe the impact of new regulations on landfill costs.
- 07.03 Estimate the cost of regulatory requirements.
- 07.04 Describe what impact size has on landfill economics.

08.0 DESCRIBE CONTROL PROCESSES FOR LANDFILL GAS AND LEACHATE--The student will be able to:

- 08.01 Review decomposition, leachate and landfill gas characteristics.
- 08.02 Describe process for determining the potential for landfill gas.
- 08.03 Describe process for locating test wells.
- 08.04 List two types of test wells.
- 08.05 Describe monitoring process used to detect the presence of methane.
- 08.06 Describe control methods for landfill gas.
- 08.07 Define and list active control systems for landfill gas.
- 08.08 Define and list passive control systems for landfill gas.
- 08.09 Describe methods for landfill gas recovery and use.
- 08.10 Review definition of leachate.
- 08.11 Describe process which prevents leachate contact with groundwater.
- 08.12 Describe control process of surface water.
- 08.13 Define leachate migration.
- 08.14 List characteristics of migration.
- 08.15 Describe controls for surface discharge of leachate.
- 08.16 Describe methods for detecting leachate discharge to groundwater.
- 08.17 List and describe methods for control of leachate migration.
- 08.18 Describe remedial actions which may be taken where leachate is contaminating groundwater.
- 08.19 List seven types of leachate treatment systems.
- 08.20 Describe methods of leachate recirculation.
- 08.21 List representative leachate treatment technologies both biological and physical/chemical and give characteristics of each.
- 08.22 List characteristics of an effective groundwater monitoring program.

09.0 DEMONSTRATE KNOWLEDGE OF DESIGN REQUIREMENTS FOR SANITARY LANDFILLS--The student will be able to:

- 09.01 Describe how specifications are used in the construction of landfills.
- 09.02 List the four (4) basic types of plans necessary to show how a facility is to be developed and describe each one.
- 09.03 Demonstrate the use of plan scale in reading plans.
- 09.04 Define contour lines and demonstrate how they are used in plan reading.
- 09.05 List items essential to following facility plans.
- 09.06 Demonstrate three (3) methods of measuring horizontal distance determining compliance with a facility plan.

- 09.07 Identify the tools needed and describe the steps necessary to measure elevations.
- 09.08 Define slope verification.
- 09.09 Demonstrate the steps necessary to perform slope determination.

10.0 DEMONSTRATE KNOWLEDGE OF STANDARD OPERATIONAL TECHNIQUES FOR SANITARY LANDFILLS--The student will be able to:

- 10.01 Identify the three basic elements which dictate facility operations.
- 10.02 Demonstrate the ability to read plans.
- 10.03 Identify the elements of a design plan.
- 10.04 Define Operational Plan.
- 10.05 List items in the daily plan which will contribute to success of the operational plan.
- 10.06 List two (2) major items an operator must control for a successful operation.
- 10.07 Identify three (3) methods for controlling moisture.
- 10.08 List three (3) methods for controlling run-off.
- 10.09 List three (3) methods for controlling waste.
- 10.10 Define confinement and list five (5) methods for facilitating confinement.
- 10.11 Define compaction and list three (3) methods which will accomplish this.
- 10.12 Demonstrate ratio of slope to compaction in an ideal landfill situation.
- 10.13 Describe the advantages of using proper soil for use as cover.
- 10.14 List three (3) types of cover and explain their functions.
- 10.15 Demonstrate knowledge of the operation of a lined sanitary landfill.
- 10.16 List (6) general items that must be accomplished to ensure a lined system will function.
- 10.17 Describe operational problems which are exacerbated by wet weather and list four (4) solutions.
- 10.18 Describe operational problems which are exacerbated by winter and list ten (10) coping strategies.
- 10.19 Describe operational problems which are exacerbated by hard to handle wastes.
- 10.20 List ten (10) hard to handle wastes and describe how they can best be handled.
- 10.21 List six (6) failures of site operation principles which could result in environmental and health problems.
- 10.22 List eight (8) major nuisance and health problems which may occur and discuss causes and potential controls that can be used to reduce the problem.

11.0 DEMONSTRATE KNOWLEDGE OF THE VARIOUS TYPES OF EQUIPMENT USED IN SANITARY LANDFILLS--The student will be able to:

- 11.01 List nine (9) uses for equipment in the operation of a sanitary landfill.
- 11.02 List six (6) types of machines and describe their advantages and disadvantages in the operation of a sanitary landfill.

- 11.03 Describe maintenance of equipment program and list nine (9) items to be performed daily.
- 11.04 Describe shutdown procedures.
- 11.05 Describe a periodic maintenance program.
- 11.06 Discuss the role of accurate records of maintenance in the decision to depreciate and replace equipment.
- 11.07 List five (5) costs which are common in the use of equipment to maintain a sanitary landfill and define each.
- 11.08 Demonstrate knowledge of bid process.
- 11.09 List methods of equipment financing.
- 11.10 Perform a total cost evaluation (TCE) of equipment considered for purchase or lease-purchase.

12.0 DEMONSTRATE KNOWLEDGE OF SITE CLOSURE METHODS AND POST-CLOSURE CONSIDERATIONS--The student will be able to:

- 12.01 List two (2) basic goals which must be met for successful site closure.
- 12.02 List the six (6) steps in preplanning the closures.
- 12.03 Describe the process which should occur three (3) months prior to closure.
- 12.04 List four (4) steps which should occur at closure.
- 12.05 List give (5) things which need to be done three months after closure.
- 12.06 Describe landfill gas control systems and explain their usefulness in long-term maintenance of a closed landfill.
- 12.07 Describe leachate control system and explain the purpose of this system.
- 12.08 Describe landfill gas and leachate monitoring systems and explain how the data gathered is used.
- 12.09 Describe how surface water and settlement can effect the containment of waste in a closed landfill.
- 12.10 Discuss some end uses for closed sites.
- 12.11 Describe each layer in the final cover: buffer layer, gas channel, filter layer, barrier, topsoil and vegetation.
- 12.12 List five (5) guidelines for constructing the final cover system.
- 12.13 List six (6) desirable characteristics for vegetation on final cover.
- 12.14 Describe how to determine soil suitability for planting and detail plant requirement for nutrients.
- 12.15 Describe method for planting and protecting the seed.
- 12.16 List seven (7) methods for controlling run-on and run-off on a closed site.
- 12.17 List information normally recorded with the parcel of land in local county recorder's office which will be used by inspectors at closure to determine acceptability of closure.
- 12.18 Describe methods of financing closure and post closure activities.
- 12.19 Demonstrate knowledge of all site safety requirements including fire safety and first aid.

13.0 PARTICIPATE IN FIELD EXERCISE WHICH WILL FAMILIARIZE THE STUDENT WITH EXISTING REAL LIFE CONDITIONS PREVALENT IN A SANITARY LANDFILL--The student will be able to:

- 13.01 List four (4) aspects of site security.
- 13.02 Discuss the importance of excluding unacceptable waste from the landfill.
- 13.03 Describe the careful execution of a monitoring permit.
- 13.04 List eleven (11) safety rules and discuss the importance of each.
- 13.05 List ten (10) individual safety items which may be found necessary for landfill personnel to be appropriately equipped.
- 13.06 Observe the size of working face at the operations field station.
- 13.07 Observe access for vehicles at operations field station.
- 13.08 Observe safety at work face at operation field station including traffic flow, spotter skills, equipment operation and safety equipment use.
- 13.09 Observe landfill equipment available at operation field station.
- 13.10 Observe compaction practices at operations field station.
- 13.11 Observe waste types received at operations field station, including liquids, hazardous wastes, special wastes.
- 13.12 Observe slope of work face at operations field station and express at _____ to _____.
- 13.13 Observe nuisance conditions at operations field station including litter control, odors, noise.
- 13.14 Observe cover at operations field station and classify as daily, intermediate and final.
- 13.15 Observe drainage control (i.e. run-on, run-off, depressions, erosions) at operations field station.
- 13.16 Observe liner integrity at field operations site including vegetation, sand blanket, erosion, waste placement and traffic.
- 13.17 Observe other factors at field operations site including leachate seeps and vegetation screening.
- 13.18 Observe sampling of monitoring well at field operations site including the purging of a well.
- 13.19 Complete laboratory analysis form.
- 13.20 List five (5) recommended procedures for maintaining monitoring well.
- 13.21 Complete chain of custody record for equipment at operations field station.
- 13.22 Observe an area of the field operations site which will illustrate the type of soil which is best for different methods of operation.
- 13.23 List various types of soil and their best use.
- 13.24 Observe the use of equipment used in soil sampling.
- 13.25 Observe use of gas sampling equipment at operations field site and demonstrate understanding of the meter readings.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Teacher Assisting	
Occupational Area:	Public Service Occupations	
	Secondary	PSAV
Program Numbers	8909000	P131299
CIP Number	0713.129902	0713.129902
Grade Level	9-12, 30, 31	30, 31
Length	3 credits	450 hours
Certification	ANY FIELD WHEN CERT REFLECT BACHELORS OR HIGHER	ANY FIELD

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as teacher aides and educational assistants (53905389), teacher aide 1 (099.327-010), teacher aides (249.367-074), or to provide supplemental training for persons previously or currently employed in these occupations. The program prepares students to assist teachers in facilitating, conducting and carrying out the objectives of educational programs within the context of the school or other setting.

The content includes, but is not limited to, state and school district rules, regulations, and policies relevant to teacher assistant responsibilities; in the areas of student behavior; school public relations; playground supervision; basic first aid, assisting in infirmary, transportation of students; clerical responsibilities; machine copying; lettering and printing; preparation of visual aids; projector operation and use; audio recording; grading tests, scantron utilization, proofreading; classroom management; working with disadvantaged and handicapped persons; employability skills; leadership and human relations skills; and health and safety.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

Listed below are the courses that comprise this program when offered at the secondary level:

8909010 - Teacher Assisting 1
8909020 - Teacher Assisting 2
8909030 - Teacher Assisting 3

- II. **LABORATORY ACTIVITIES:** Laboratory activities and clinical assigned experiences are an integral part of this program.
- III. **SPECIAL NOTE:** The cooperative method of instruction may be used for this program. When the cooperative method is offered, the following is required for each student: (1) a training plan, signed by the student, teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment skills, and tasks relevant to the student's career goal. This method may be used to provide financial aid to students. The student must receive compensation for work performed.

Florida Public Service Association, is the appropriate vocational student organization for providing leadership training and reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

In accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

Students are required to participate in varied educational experiences from different individuals/teachers.

The typical length of this program for the average achieving student is 450 hours.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:
- 01.0 Demonstrate knowledge, skills, and attitudes that are needed to be an effective teacher aide.
 - 02.0 Discuss the foundation of education.
 - 03.0 Discuss major issues concerning public education.
 - 04.0 Demonstrate knowledge of skills which aid in establishing and maintaining desirable student behaviors.
 - 05.0 Describe home-school relationships.
 - 06.0 Operate copy machines, collators, mimeograph, slide-tape projector, VCR, movie and screen.
 - 07.0 Prepare tapes, transparencies, photographs and other visual aides.
 - 08.0 Grade tests, use scantron machine, analyze items.
 - 09.0 Supervise the safety, health and welfare of students.
 - 10.0 Perform clerical duties assigned.
 - 11.0 Demonstrate employability skills.
 - 12.0 Demonstrate various methods of communication.
 - 13.0 Demonstrate application of knowledge of basic math skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Teacher Assisting
Secondary Number: 8909000
Postsecondary Number: P131299

01.0 DEMONSTRATE KNOWLEDGE, SKILLS, AND ATTITUDES THAT ARE NEEDED TO BE AN EFFECTIVE TEACHER AIDE--The student will be able to:

- 01.01 Define the role of the teacher aide.
- 01.02 List the growth stages of children.
- 01.03 Discuss the teacher aide-teacher relationship.
- 01.04 Describe some tasks for which the teacher aide will be accountable.
- 01.05 Describe some tasks for which the teacher aide will be assisting the teacher.
- 01.06 List the characteristics of an effective teacher aide.
- 01.07 Describe the teacher aide - school principal relationship.
- 01.08 Demonstrate effective oral and written communication.
- 01.09 Demonstrate the ability to follow oral and written instructions.
- 01.10 Describe career progression for teacher aides.
- 01.11 Describe some tasks/activities which the teacher aide may not perform at a specific school.
- 01.12 Listen effectively to students, teachers, and others.
- 01.13 Discuss the teacher aide/counselor relationship and responsibilities in counseling students.
- 01.14 Tell what is meant by competency based instruction.
- 01.15 Display knowledge of existing local, state and Federal regulations governing teacher assistants.
- 01.16 Work individually with slow learners.
- 01.17 Demonstrate knowledge of manuscript writing.
- 01.18 Express self orally and in writing.
- 01.19 Use planned repetition effectively.
- 01.20 Demonstrate effective use of the chalkboard.
- 01.21 Demonstrate awareness that teachers have plans and objectives that must be followed by assistants, and aid teacher with such planning.
- 01.22 Help absentees with makeup work.
- 01.23 When given a formula, determine reading levels of instructional materials.

02.0 DISCUSS THE FOUNDATION OF EDUCATION--The student will be able to:

- 02.01 State the purposes of education in America.
- 02.02 Describe the constitutional authorization for public education.
- 02.03 Discuss the background of the development of the teacher aide movement and its reason for being needed.

03.0 DISCUSS MAJOR ISSUES CONCERNING PUBLIC EDUCATION--The student will be able to:

- 03.01 Discuss child abuse and its relationship to the school's employees.
 - 03.02 Describe the foundation and structure of a good public relations program for a school/district.
 - 03.03 Discuss the concept of "excellence" as the responsibility of the local classroom, the county policy and the state legislative appropriations.
 - 03.04 Describe the effects of the present day drug culture and alcohol abuse, and methods of identification.
- 04.0 DEMONSTRATE KNOWLEDGE OF SKILLS WHICH AID IN ESTABLISHING AND MAINTAINING DESIRABLE STUDENT BEHAVIORS--The student will be able to:
- 04.01 Observe and report critical incidents.
 - 04.02 Describe and discuss classroom behavior and discipline problems.
 - 04.03 Discuss the techniques of reinforcement that will serve to eliminate the undesirable behaviors.
 - 04.04 Display knowledge of rules, regulations and standard procedures in effect in the school.
 - 04.05 Recognize inappropriate behavior.
 - 04.06 Display knowledge of pupil behavior.
 - 04.07 Assist in maintaining order in classroom.
 - 04.08 Use positive approaches in the classroom.
 - 04.09 Use the power of praise effectively.
 - 04.10 Use value clarifying techniques to help cope with stress.
- 05.0 DESCRIBE HOME-SCHOOL RELATIONSHIPS--The student will be able to:
- 05.01 Assess parent-child relationship.
 - 05.02 Evaluate parent responses in discussions of child misbehaviors.
 - 05.03 Recognize that body language speaks louder than words.
 - 05.04 Provide information to parents (nonjudgmentally).
 - 05.05 Recognize need for cooperation of parents.
- 06.0 OPERATE COPY MACHINES, COLLATORS, MIMOGRAPH, SLIDE-TAPE PROJECTOR, VCR, MOVIE AND SCREEN--The student will be able to:
- 06.01 Label selected parts of each of the pieces of equipment listed above.
 - 06.02 State the function of each of the selected parts of the equipment listed below.
 - 06.03 Demonstrate the successful operation of the equipment listed below.
 - 06.04 Troubleshoot when given specific problems for selected equipment and state how the problem can be solved to allow for the correct operation of the equipment.
 - 06.05 Use duplex copy cycle (front and back).
 - 06.06 Obtain films, other visual aids.
 - 06.07 Leave apparatus in usable, clean condition and return visual aides and equipment to storage.
- 07.0 PREPARE TAPES, TRANSPARENCIES, PHOTOGRAPHS AND OTHER VISUAL AIDS--The student will be able to:

- 07.01 Prepare bulletin board displays.
- 07.02 Prepare complex transparencies as needed.
- 07.03 Load film into camera.
- 07.04 Operate a camera to obtain a sharp, clear, centered picture.
- 07.05 Prepare games and puzzles for teacher use.
- 07.06 Prepare slide-tape presentations.

08.0 GRADE TESTS, USE SCANTRON MACHINE, ANALYZE ITEMS--The student will be able to:

- 08.01 Demonstrate ability in standardized achievement testing.
- 08.02 Demonstrate ability in the administration of tests.
- 08.03 Demonstrate ability in the scoring of standardized tests.
- 08.04 Demonstrate ability in objective type tests.
- 08.05 Demonstrate the ability and knowledge necessary to distinguish between objective tests and answers from subjective tests and answers.
- 08.06 Use scantron machine for scoring tests.
- 08.07 Perform an item analysis.
- 08.08 Test student reading, math, and language levels.

09.0 SUPERVISE THE SAFETY, HEALTH AND WELFARE OF STUDENTS--The student will be able to:

- 09.01 Provide help for the student who becomes ill.
- 09.02 Demonstrate a knowledge of first aid and safety.
- 09.03 Supervise playground and equipment.

10.0 PERFORM CLERICAL DUTIES ASSIGNED--The student will be able to:

- 10.01 Take care of all cash collected/receipted (lunch, etc.).
- 10.02 Perform clerical duties assigned such as attendance records and completing school forms both state and local.
- 10.03 Take attendance.
- 10.04 Proofread.
- 10.05 File.
- 10.06 Laminate material.
- 10.07 Type.
- 10.08 Inventory of supplies.
- 10.09 Distribute and collect instructional materials.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 11.01 Conduct a job search.
- 11.02 Secure information about a job.
- 11.03 Identify documents that may be required when applying for a job.
- 11.04 Complete a job application.
- 11.05 Demonstrate competence in job interview techniques.
- 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate knowledge of how to make job changes appropriately.

11.09 Demonstrate acceptable employee health habits.

12.0 DEMONSTRATE VARIOUS METHODS OF COMMUNICATION--The student will be able to:

- 12.01 Define unfamiliar educational terms by use of structural analysis, decoding, contextual clues or by using a dictionary.
- 12.02 Distinguish factual reports and personal opinion.
- 12.03 Demonstrate ability to report observations in written or oral form.

13.0 DEMONSTRATE APPLICATION OF KNOWLEDGE OF BASIC MATH SKILLS--The student will be able to:

- 13.01 Draw, read, and analyze and report on graphs, charts, and tables.
- 13.02 Measure time, temperature, distance, capacity and mass/weight.
- 13.03 Make and use measurements in both traditional and metric units.
- 13.04 Make estimates and approximations and judge the reasonableness of the result.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8909010
Course Title: Teacher Assisting 1
Course Credit: 1

COURSE DESCRIPTION:

This course introduces students to the basic skills and attitudes of being a teacher's aide.

01.0 DEMONSTRATE KNOWLEDGE, SKILLS, AND ATTITUDES THAT ARE NEEDED TO BE AN EFFECTIVE TEACHER AIDE--The student will be able to:

- 01.01 Define the role of the teacher aide.
- 01.02 List the growth stages of children.
- 01.03 Discuss the teacher aide-teacher relationship.
- 01.04 Describe some tasks for which the teacher aide will be accountable.
- 01.05 Describe some tasks for which the teacher aide will be assisting the teacher.
- 01.06 List the characteristics of an effective teacher aide.
- 01.07 Describe the teacher aide - school principal relationship.
- 01.08 Demonstrate effective oral and written communication.
- 01.09 Demonstrate the ability to follow oral and written instructions.
- 01.10 Describe career progression for teacher aides.
- 01.11 Describe some tasks/activities which the teacher aide may not perform at a specific school.
- 01.12 Listen effectively to students, teachers, and others.
- 01.13 Discuss the teacher aide/counselor relationship and responsibilities in counseling students.
- 01.14 Tell what is meant by competency based instruction.
- 01.15 Display knowledge of existing local, state and Federal regulations governing teacher assistants.
- 01.16 Work individually with slow learners.
- 01.17 Demonstrate knowledge of manuscript writing.
- 01.18 Express self orally and in writing.
- 01.19 Use planned repetition effectively.
- 01.20 Demonstrate effective use of the chalkboard.
- 01.21 Demonstrate awareness that teachers have plans and objectives that must be followed by assistants, and aid teacher with such planning.
- 01.22 Help absentees with makeup work.
- 01.23 When given a formula, determine reading levels of instructional materials.

02.0 DISCUSS THE FOUNDATION OF EDUCATION--The student will be able to:

- 02.01 State the purposes of education in America.

- 02.02 Describe the constitutional authorization for public education.
- 02.07 Discuss the background of the development of the teacher aide movement and its reason for being needed.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 11.01 Conduct a job search.
- 11.02 Secure information about a job.
- 11.03 Identify documents that may be required when applying for a job.
- 11.04 Complete a job application.
- 11.05 Demonstrate competence in job interview techniques.
- 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate knowledge of how to make job changes appropriately.
- 11.09 Demonstrate acceptable employee health habits.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8909020
Course Title: Teacher Assisting 2
Course Credit: 1

COURSE DESCRIPTION:

This course allows the student to develop skills that are necessary to function as a teacher's aide.

03.0 DISCUSS MAJOR ISSUES CONCERNING PUBLIC EDUCATION--The student will be able to:

- 03.01 Discuss child abuse and its relationship to the school's employees.
- 03.02 Describe the foundation and structure of a good public relations program for a school/district.
- 03.03 Discuss the concept of "excellence" as the responsibility of the local classroom, the county policy and the state legislative appropriations.
- 03.04 Describe the effects of the present day drug culture and alcohol abuse, and methods of identification.

05.0 DESCRIBE HOME-SCHOOL RELATIONSHIPS--The student will be able to:

- 05.01 Assess parent-child relationship.
- 05.02 Evaluate parent responses in discussions of child misbehaviors.
- 05.03 Recognize that body language speaks louder than words.
- 05.04 Provide information to parents (nonjudgmentally).
- 05.05 Recognize need for cooperation of parents.

06.0 OPERATE COPY MACHINES, COLLATORS, MIMEOGRAPH, SLIDE-TAPE PROJECTOR, VCR, MOVIE AND SCREEN--The student will be able to:

- 06.01 Label selected parts of each of the pieces of equipment listed above.
- 06.02 State the function of each of the selected parts of the equipment listed below.
- 06.03 Demonstrate the successful operation of the equipment listed above.
- 06.04 Troubleshoot when given specific problems for selected equipment and state how the problem can be solved to allow for the correct operation of the equipment.
- 06.05 Use duplex copy cycle (front and back).
- 06.06 Obtain films, other visual aids.
- 06.07 Leave apparatus in usable, clean condition and return visual aides and equipment to storage.

07.0 PREPARE TAPES, TRANSPARENCIES, PHOTOGRAPHS AND OTHER VISUAL AIDS--The student will be able to:

- 07.01 Prepare bulletin board displays.
- 07.02 Prepare complex transparencies as needed.
- 07.03 Load film into camera.
- 07.04 Operate a camera to obtain a sharp, clear, centered picture.
- 07.05 Prepare games and puzzles for teacher use.
- 07.06 Prepare slide-tape presentations.

12.0 DEMONSTRATE VARIOUS METHODS OF COMMUNICATION--The student will be able to:

- 12.01 Define unfamiliar educational terms by use of structural analysis, decoding, contextual clues or by using a dictionary.
- 12.02 Distinguish factual reports and personal opinion.
- 12.03 Demonstrate ability to report observations in written or oral form.

13.0 DEMONSTRATE APPLICATION OF KNOWLEDGE OF BASIC MATH SKILLS--The student will be able to:

- 13.01 Draw, read, and analyze and report on graphs, charts, and tables.
- 13.02 Measure time, temperature, distance, capacity and mass/weight.
- 13.03 Make and use measurements in both traditional and metric units.
- 13.04 Make estimates and approximations and judge the reasonableness of the result.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8909030

Course Title: Teacher Assisting 3

Course Credit: 1

COURSE DESCRIPTION:

04.0 DEMONSTRATE KNOWLEDGE OF SKILLS WHICH AID IN ESTABLISHING AND MAINTAINING DESIRABLE STUDENT BEHAVIORS--The student will be able to:

- 04.01 Observe and report critical incidents.
- 04.02 Describe and discuss classroom behavior and discipline problems.
- 04.03 Discuss the techniques of reinforcement that will serve to eliminate the undesirable behaviors.
- 04.04 Display knowledge of rules, regulations and standard procedures in effect in the school.
- 04.05 Recognize inappropriate behavior.
- 04.06 Display knowledge of pupil behavior.
- 04.07 Assist in maintaining order in classroom.
- 04.08 Use positive approaches in the classroom.
- 04.09 Use the power of praise effectively.
- 04.11 Use value clarifying techniques to help cope with stress.

08.0 GRADE TESTS, USE SCANTRON MACHINE, ANALYZE ITEMS--The student will be able to:

- 08.01 Demonstrate ability in standardized achievement testing.
- 08.02 Demonstrate ability in the administration of tests.
- 08.03 Demonstrate ability in the scoring of standardized tests.
- 08.04 Demonstrate ability in objective type tests.
- 08.05 Demonstrate the ability and knowledge necessary to distinguish between objective tests and answers from subjective tests and answers.
- 08.06 Use scantron machine for scoring tests.
- 08.07 Perform an item analysis.
- 08.08 Test student reading, math, and language levels.

09.0 SUPERVISE THE SAFETY, HEALTH AND WELFARE OF STUDENTS--The student will be able to:

- 09.01 Provide help for the student who becomes ill.
- 09.02 Demonstrate a knowledge of first aid and safety.
- 09.03 Perform CPR correctly on a mannequin.
- 09.04 Supervise playground and equipment.

10.0 PERFORM CLERICAL DUTIES ASSIGNED--The student will be able to:

- 10.01 Take care of all cash collected/receipted (lunch, etc.).
- 10.02 Perform clerical duties assigned such as attendance records and completing school forms both state and local.
- 10.03 Take attendance.
- 10.04 Proofread.
- 10.05 File.
- 10.06 Laminate material.
- 10.07 Type,
- 10.08 Inventory of supplies.
- 10.09 Distribute and collect instructional materials.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Traffic Accident Investigation
Occupational Area: Public Service Occupations

PSAV

Program Numbers P439990
CIP Number 0743.999900
Grade Level 30, 31
Length 200 hours
Certification LAW ENF @7 G
PUB SERV @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as traffic accident investigators (375.263-014) or to provide supplemental training for persons previously or currently employed in this occupation. The program prepares students for employment as a traffic accident investigator in accordance with Chapter 316, Florida Statutes.

The content includes, but is not limited to, investigator's role, constitutional and criminal law, search and seizure, patrol procedures, accident investigation, first responder techniques, traffic control, police community relations, and administration of criminal law as designated in minimum training requirements as established by the Criminal Justice Standards and Training Commission.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and field experiences are an integral part of this program. Basics of legal matters involving accident investigation, law of arrest, report writing and accident reconstruction are an integral part of this course. The first responder course, case preparation, communications, interviewing techniques and health and safety are required.
- III. **SPECIAL NOTE:** The traffic accident investigators program is provided for in section 316.640 of the Florida Statutes, and is approved by the Criminal Justice Standards and Training Commission.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 10.0, Reading 9.0. This grade level number corresponds to a

grade equivalent score obtained on a state designated basic skills examination.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

The typical length of this program for the average achieving student is 200 hours as prescribed by the Commission.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- 01.0 Explain the accident investigators role, ethics and professionalism.
- 02.0 Describe constitutional law, criminal law, civil actions, traffic law, criminal acts, laws of arrest and demonstrate how to find the law.
- 03.0 Describe laws of evidence and perform search and seizure.
- 04.0 Demonstrate patrol procedures.
- 05.0 Complete on scene accident investigations.
- 06.0 Demonstrate first responder techniques.
- 07.0 Control traffic.
- 08.0 Explain police community relations.
- 09.0 Explain administration of criminal law.
- 10.0 Demonstrate employability skills.
- 11.0 Demonstrate an understanding of entrepreneurship.
- 12.0 Demonstrate knowledge of sexually transmitted diseases, including AIDS.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Traffic Accident Investigation
Secondary Number:
Postsecondary Number: P439990

01.0 EXPLAIN THE ACCIDENT INVESTIGATOR'S ROLE, ETHICS AND PROFESSIONALISM--
The student will be able to:

- 01.01 Explain accident investigator's role.
- 01.02 Explain ethics and professionalism.

02.0 DESCRIBE CONSTITUTIONAL LAW, CRIMINAL LAW, CIVIL ACTIONS, TRAFFIC LAWS, CRIMINAL ACTS, LAWS OF ARREST AND DEMONSTRATE HOW TO FIND THE LAW--The student will be able to:

- 02.01 Describe constitutional law as a basis for the criminal justice system.
- 02.02 Describe criminal law and definitions as it pertains to criminal acts.
- 02.03 Describe the paraprofessionals role in relationship to civil actions involving accident cases.
- 02.04 Identify and describe most frequently used traffic codes as it relates to traffic accidents.
- 02.05 Recognize criminal acts and report to proper authority.
- 02.06 Locate sources of Municipal, State and Federal laws.
- 02.07 Describe laws of arrest and explain the difference between misdemeanors and felonies.

03.0 DESCRIBE LAWS OF EVIDENCE AND PERFORM SEARCH AND SEIZURE--The student will be able to:

- 03.01 Describe rules of evidence and their application to proper law enforcement.
- 03.02 Perform search and seizure as applicable to motor vehicles.

04.0 DEMONSTRATE PATROL PROCEDURES--The student will be able to:

- 04.01 Use the telephone and police radio properly.
- 04.02 Recognize the symptoms of mental illness and retardation and notify the proper authorities.
- 04.03 Perform foot patrol and vehicular patrol and recognize police hazards.
- 04.04 Secure the necessary evidence, including the scientific tests, and reports in order to successfully prosecute impaired drivers.
- 04.05 Operate a vehicle according to National Safety Council standards.

05.0 COMPLETE ON SCENE ACCIDENT INVESTIGATIONS--The student will be able to:

- 05.01 Define the terminology pertinent to accident investigation and reporting procedures.
- 05.02 Identify the direct and indirect causes of the accident.
- 05.03 Demonstrate the protection of scene of an accident.
- 05.04 Determine the chain of events that occurred prior to the final resting place of the vehicles/persons involved.
- 05.05 Reconstruct accident from available evidence.
- 05.06 Discuss various attributes and deficiencies related to all people and objects involved.
- 05.07 Protect scene from fire and theft.
- 05.08 Control crowds from contaminating the scene.
- 05.09 Explain the added responsibility placed on the accident investigator when serious injuries are indicated.
- 05.10 Interview drivers and witnesses.
- 05.11 Complete state accident forms.
- 05.12 Write a traffic citation and explain surcharges.
- 05.13 Complete an alcohol influence report.
- 05.14 Explain the Implied Consent law.
- 05.15 Explain procedures in processing insurance claims under a "no-fault" insurance system.
- 05.16 Explain the Florida Reparations Reform Act and compare with "fault" based systems.
- 05.17 Answer the public inquiries intelligently with respect to legal requirements of insurance laws under the Florida Act.
- 05.18 Diagram and explain, from a reconstruction standpoint, the chain of events.
- 05.19 Locate and preserve items of value to the overall investigation, i.e. skidmarks, yaw marks, glass, blood, hairs, fabric, etc.
- 05.20 Compute the known drag factor of a given piece of roadway by test procedures.
- 05.21 Locate, prove legal validity and determine minimum speed required to produce skids.
- 05.22 Measure test skids to determine speed computation - individual wheel braking, etc.
- 05.23 Use camera and explain composition of pictures.
- 05.24 Use template and nomograph.
- 05.25 Explain methods of follow-up, gathering and use of evidence for successful prosecution.
- 05.26 Explain the importance of comprehensive vehicular homicide investigations.
- 05.27 Explain the "Good Samaritan" Law.
- 05.28 Explain the accident investigator relationship to the insurance adjustor and attorneys.
- 05.29 Prepare case for trial.
- 05.30 Determine the cost estimate.

06.0 DEMONSTRATE FIRST RESPONDER TECHNIQUES--The student will be able to:

- 06.01 Perform triage.
- 06.02 Perform first responder techniques.
- 06.03 Perform CPR.
- 06.04 Identify health problems and determine proper action.

07.0 CONTROL TRAFFIC--The student will be able to:

- 07.01 Control traffic flow of vehicles and pedestrians by means of hand signals.
- 07.02 Identify elements of the violation and their application.
- 07.03 Demonstrate techniques of traffic control and enforcement using special equipment for traffic control.
- 07.04 Recommend corrections of hazardous traffic conditions; include the proper procedures to be used in forwarding relevant information to the correct authority.

08.0 EXPLAIN POLICE COMMUNITY RELATIONS--The student will be able to:

- 08.01 Demonstrate self control and discipline, level headedness, courtesy and fairness, good personal appearance, neatness and punctuality.
- 08.02 Handle situations which result from conflict of behavior as it pertains to psychological and sociological factors.
- 08.03 Demonstrate an understanding of the racial, religious, cultural, and ethnic background of various minority groups.
- 08.04 Identify the social services available to the investigator at the local level.

09.0 EXPLAIN ADMINISTRATION OF CRIMINAL LAW--The student will be able to:

- 09.01 Describe general court organization, jurisdiction, procedure and functions, including the jury, complaint forms, writs, subpoenas, warrants and other allied papers and court orders.
- 09.02 Describe the relationship of the investigator with various judicial officers.
- 09.03 Describe courtroom demeanor and testify.
- 09.04 Participate in mock trial as an investigator.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 10.01 Conduct a job search.
- 10.02 Secure information about a job.
- 10.03 Identify documents that may be required when applying for a job.
- 10.04 Complete a job application.
- 10.05 Demonstrate competence in job interview techniques.
- 10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 10.07 Identify acceptable work habits.
- 10.08 Demonstrate knowledge of how to make job changes appropriately.
- 10.09 Demonstrate acceptable employee health habits.

11.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:

- 11.01 Define entrepreneurship.
- 11.02 Describe the importance of entrepreneurship to the American economy.
- 11.03 List the advantages and disadvantages of business ownership.

- 11.04 Identify the risks involved in ownership of a business.
 - 11.05 Identify the necessary personal characteristics of a successful entrepreneur.
 - 11.06 Identify the business skills needed to operate a small business efficiently and effectively.
- 12.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--
The student will be able to:
- 12.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases, including HIV infection.
 - 12.02 Identify community resources and services available to the victims of sexually transmitted diseases.
 - 12.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
 - 12.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
 - 12.05 Demonstrate knowledge of the legal aspects of AIDS.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Urban Planning Technology
Occupational Area: Public Service Occupations

PSV

CIP Number 0715.020400
Grade Level College Credits
Length AS Degree

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as county or city planning aides (199.364-010), traffic technicians (199.267-030), or regional planning aides (10181000), building inspectors or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, urban design, resource distribution, demographics, statistical analysis, city and county zoning regulations, building standards and codes, residential development, organizational structures of city and county governments, basic principles and laws governing urban development, urban geography, economic development, social problems, planning surveys, housing market, traffic patterns and circulation, cartography, data processing, drafting, employability skills, leadership and human relations skills, and health and safety.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities incorporate practical application of scientific principles.
- III. **SPECIAL NOTE:** The cooperative method of instruction may be used for this program. When the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The typical length of this program for an average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Demonstrate knowledge of urban design redevelopment and community services.
- 02.0 Demonstrate knowledge of population growth, growth management, transportation and housing.
- 03.0 Demonstrate knowledge of building and construction codes/regulations.
- 04.0 Demonstrate knowledge of traffic management and control.
- 05.0 Demonstrate knowledge of water and wastewater systems and solid waste disposal.
- 06.0 Demonstrate knowledge of electrical systems, urban mapping and engineering drawing.
- 07.0 Demonstrate knowledge of the sociological aspects of all phases of urban planning.
- 08.0 Demonstrate employability skills.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Urban Planning Technology
Secondary Number:
Postsecondary Number: 0715.020400

01.0 DEMONSTRATE KNOWLEDGE OF URBAN DESIGN REDEVELOPMENT AND COMMUNITY SERVICES--The student will be able to:

- 01.01 Research the design of the city of Washington D.C. and describe the difference in design from that of New York City.
- 01.02 Discuss the redevelopment needs of any city.
- 01.03 List the major community services which must be planned for and briefly identify any special considerations for each.
- 01.04 Define planning and list the elements needed for urban development.
- 01.05 Discuss the development of the American city planning process including contemporary decision making processes, the operation, and responsibilities of planning activities, the role of the city planning commission and professional staff.
- 01.06 List contemporary organizations for citizen participation in the planning process.
- 01.07 Describe the city of Apopka in 1955 and 1985 and tell the major reasons for the dramatic change.
- 01.08 Discuss the role of planning in meeting critical problems and shaping the future of a community (Love Canal, 3 Mile Island).

02.0 DEMONSTRATE KNOWLEDGE OF POPULATION GROWTH, GROWTH MANAGEMENT, TRANSPORTATION AND HOUSING--The student will be able to:

- 02.01 Describe two techniques for making population projections.
- 02.02 Identify three population characteristics and briefly describe their importance in planning.
- 02.03 List four growth management techniques and describe each.
- 02.04 Identify four transportation systems and briefly describe the importance of each and the planning needs for each.
- 02.05 Describe contemporary housing types and problems related to land use.
- 02.06 List the elements of planning required for each type of housing described in 02.05 above.
- 02.07 Demonstrate knowledge of statistical concepts related to management/use of numerical data.
- 02.08 Describe the methods used by planners in the analysis of problems and the development of a plan.
- 02.09 Identify planning approaches and strategies for meeting development, growth, and land use problems.

03.0 DEMONSTRATE KNOWLEDGE OF BUILDING AND CONSTRUCTION CODES/REGULATIONS--The student will be able to:

- 03.01 In planning a building, describe in which agencies you would locate the required codes and regulations.

- 03.02 Use reference manuals, such as Location Survey Manual, Typical design standards and county public works manuals, to locate zoning codes, building codes, and subdivision regulations.
 - 03.03 Describe the environmental considerations which affect planning decision making.
 - 03.04 Collect data for origin/destination studies.
 - 03.05 Trace typographic map details.
 - 03.06 Trace plat lot boundaries.
 - 03.07 List the various types of building materials used and discuss the advantages/disadvantages of each.
 - 03.08 Discuss the gradual development of a national housing and community development policy.
 - 03.09 Perform an economic base analysis.
- 04.0 DEMONSTRATE KNOWLEDGE OF TRAFFIC MANAGEMENT AND CONTROL--The student will be able to:
- 04.01 Describe techniques used in traffic management and control.
 - 04.02 List the elements of planning for traffic control.
 - 04.03 Perform traffic counts.
 - 04.04 Collect traffic signal timing data.
 - 04.05 Discuss planning for transportation of hazardous materials.
 - 04.06 Identify problems associated with planning for airport expansion needs.
 - 04.07 Use data processing equipment.
- 05.0 DEMONSTRATE KNOWLEDGE OF WATER AND WASTEWATER SYSTEMS AND SOLID WASTE DISPOSAL--The student will be able to:
- 05.01 Identify the basic characteristics of water.
 - 05.02 Identify causes of contamination entering the distribution system.
 - 05.03 Describe the principles of drinking water disinfection.
 - 05.04 Describe Department of Environmental Regulation rules and regulations and relate these to urban planning for water and wastewater.
 - 05.05 Describe the principles and operation of wastewater disinfection.
 - 05.06 Describe planning for disposal of solid wastes.
- 06.0 DEMONSTRATE KNOWLEDGE OF ELECTRICAL SYSTEMS, URBAN MAPPING AND ENGINEERING DRAWING--The student will be able to:
- 06.01 Demonstrate a basic knowledge of drafting including the use of drafting equipment.
 - 06.02 Demonstrate a basic knowledge of legal land descriptions.
 - 06.03 Describe electrical systems giving advantages and disadvantages.
 - 06.04 List four land use planning principles.
 - 06.05 Discuss the evolving process of land use including existing patterns.
 - 06.06 Describe the ecology of an urban setting and draw a map of an ideal community.
 - 06.07 List the components of a city or county map.

07.0 DEMONSTRATE KNOWLEDGE OF THE SOCIOLOGICAL ASPECTS OF ALL PHASES OF URBAN PLANNING--The student will be able to:

- 07.01 Discuss planning thought, methods, and issues.
- 07.02 Define comprehensive planning.
- 07.03 Give examples of sociological aspects of urban planning.
- 07.04 State the impact of immigration on urban areas.
- 07.05 Discuss health planning and community needs.
- 07.06 Describe the current status of health planning in Florida.
- 07.07 Describe controversial issues related to health planning program implementation.

08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 08.01 Conduct a job search.
- 08.02 Secure information about a job.
- 08.03 Identify documents that may be required when applying for a job.
- 08.04 Complete a job application.
- 08.05 Demonstrate competence in job interview techniques.
- 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 08.07 Identify acceptable work habits.
- 08.08 Demonstrate knowledge of how to make job changes appropriately.
- 08.09 Demonstrate acceptable employee health habits.

Secondary PSAV

I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for non-paid employment as volunteer firefighters (industry title), or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, fire department organization, communications, fire behavior, extinguishers, protective breathing equipment, ropes, tools and equipment, ladders, hoses and nozzles, fire streams, forcible entry, ventilation, salvage, overhaul, rescue, inspection, and safety.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

The Rules of the State Fire Marshal Chapter 4A-37, Standards and Training, state: In demonstrations involving the use of equipment and performance of tasks under nonhazardous conditions, whether in the classroom or the field, there shall be no less than one certified instructor for each ten students participating in the demonstrations.

In field work involving the handling of equipment and performance of tasks under conditions considered hazardous, there shall be no less than one certified instructor for each six students, but in no case shall there be less than two certified instructors on the scene. The

instructors shall be placed to oversee the safety and effectiveness of the training.

- III. **SPECIAL NOTE:** Completion of a course based on the U.S. Department of Transportation Emergency Medical Services First Responder Course is encouraged.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 150 hours.

Definitions: The following are definitions taken from NFPA 1001:

define:	to describe the basic qualities and principles
demonstrate:	to show by actual use
identify:	to physically select, indicate, or explain verbally or in writing, using standard terms recognized in the fire service.

NOTE: When the word demonstrate is used in a standard, it shall require that actual performance and operation be accomplished, unless otherwise indicated. Simulation, explanation, and illustration may be substituted when actual operation is not feasible.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

- | | |
|------|--|
| 01.0 | Demonstrate knowledge of fire department organization. |
| 02.0 | Use fire alarms and communications equipment. |
| 03.0 | Demonstrate knowledge of fire behavior. |
| 04.0 | Use portable fire extinguishers. |
| 05.0 | Use self-contained breathing apparatus. |
| 06.0 | Demonstrate knowledge of fire apparatus. |
| 07.0 | Use forcible entry equipment. |
| 08.0 | Demonstrate ventilation practices. |
| 09.0 | Use rope, tools, and equipment. |
| 10.0 | Demonstrate rescue procedures. |
| 11.0 | Demonstrate safety procedures. |
| 12.0 | Use ladders. |
| 13.0 | Use fire hose, nozzles, and appliances. |
| 14.0 | Use fire streams. |
| 15.0 | Use water supplies. |
| 16.0 | Use sprinkler systems. |
| 17.0 | Demonstrate salvage procedures. |
| 18.0 | Demonstrate overhaul procedures. |
| 19.0 | Follow fire prevention inspection practices. |
| 20.0 | Demonstrate knowledge of the fundamentals of extinguishment. |
| 21.0 | Follow health and human relations practices. |

- 22.0 Participate in fire training examinations.
- 23.0 Demonstrate knowledge of sexually transmitted diseases, including AIDS.
- 24.0 Demonstrate various methods of communication.
- 25.0 Demonstrate application of knowledge of basic math skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Volunteer Fire Fighting
Secondary Number: 8918200
Postsecondary Number: P430213

01.0 DEMONSTRATE KNOWLEDGE OF FIRE DEPARTMENT ORGANIZATION AND PROCEDURES--
The student will be able to:

- 01.01 Identify the organization of the fire department.
- 01.02 Identify the size of the fire department, the scope of its operation, and the standard operational procedures.
- 01.03 Identify the fire department rules and regulations that apply to the position of firefighter.

02.0 USE FIRE ALARMS AND COMMUNICATIONS EQUIPMENT--The student will be able to:

- 02.01 Define the procedure for a citizen to report a fire or other emergency.
- 02.02 Demonstrate receiving an alarm or a report of an emergency, and initiate action.
- 02.03 Define the purpose and function of all alarm-receiving instruments and personnel-alerting equipment in the fire station.
- 02.04 Identify traffic control devices installed in the fire station to facilitate the response of apparatus.
- 02.05 Identify prescribed fire department radio procedures.
- 02.06 Define policy and procedures concerning the ordering and transmitting of multiple alarms of fire and calls for special assistance from the emergency scene.

03.0 DEMONSTRATE KNOWLEDGE OF FIRE BEHAVIOR--The student will be able to:

- 03.01 Define fire.
- 03.02 Define the fire triangle and tetrahedron.
- 03.03 Identify two chemical, mechanical, and electrical energy heat sources.
- 03.04 Define the following potential stages of fire: (a) incipient; (b) flame spread; (c) hot smoldering; (d) flash over; (e) steady state; (f) clear burning.
- 03.05 Define the three methods of heat transfer.
- 03.06 Define the three physical stages of matter in which fuels are commonly found.
- 03.07 Define the hazard of finely divided fuels as they relate to the combustion process.
- 03.08 Define flash point, fire point, and ignition temperature.
- 03.09 Define concentrations of oxygen in air as it affects combustion.
- 03.10 Identify three products of combustion commonly found in structural fires which create a life hazard.

04.0 USE PORTABLE FIRE EXTINGUISHERS--The student will be able to:

- 04.01 Identify the classification of types of fire as they relate to the use of portable extinguishers.
- 04.02 Given a group of differing extinguishers, identify the appropriate extinguishers for the various classes of fire.
- 04.03 Define the portable extinguisher rating system.
- 04.04 Demonstrate the use of portable fire extinguishers for each class of fire.

05.0 USE SELF-CONTAINED BREATHING APPARATUS--The student will be able to:

- 05.01 Identify at least four hazardous respiratory environments encountered in fire fighting.
- 05.02 Demonstrate the use of all types of self-contained breathing apparatus in a dense smoke environment.
- 05.03 Identify the physical requirements of the wearer, the limitations of the self-contained breathing apparatus, and the safety features of all types of self-contained breathing apparatus.
- 05.04 Demonstrate donning self-contained breathing apparatus while wearing protective clothing.
- 05.05 Demonstrate that the self-contained breathing apparatus is in a safe condition for immediate use.
- 05.06 Identify the procedure for cleaning and sanitizing self-contained breathing apparatus for future use.

06.0 DEMONSTRATE KNOWLEDGE OF FIRE APPARATUS--The student will be able to:

- 06.01 Identify the function of a fire company.
- 06.02 Describe the functions of the following units: (a) pumper company; (b) aerial company; (c) rural company; (d) a crash fire rescue unit; (e) elevated platform.
- 06.03 Describe crash-fire-rescue and its uses.
- 06.04 Identify special equipment used in the following apparatus: (a) rescue; (b) chemical; (c) floodlight and power; (d) air truck.

07.0 USE FORCIBLE ENTRY EQUIPMENT--The student will be able to:

- 07.01 Identify and demonstrate the use of each type of manual forcible entry tool.
- 07.02 Identify the method and procedure of properly cleaning, maintaining, and inspecting each type of forcible entry tool and equipment.

08.0 DEMONSTRATE VENTILATION PRACTICES--The student will be able to:

- 08.01 Define the principles of ventilation, and identify the advantages and effects of ventilation.
- 08.02 Identify the dangers present and precautions to be taken in performing ventilation.
- 08.03 Demonstrate opening various types of windows from inside and outside, with and without the use of fire department tools.

- 08.04 Demonstrate breaking window or door glass and removing obstruction.
- 08.05 Demonstrate the ventilation of a roof and a floor using an axe.
- 08.06 Define the theory of a "back draft explosion."
- 09.0 USE ROPES, TOOLS, AND EQUIPMENT--The student will be able to:
 - 09.01 Given the name, picture, or actual know, identify it and describe the purpose for which it would be used.
 - 09.02 Identify the construction characteristics and appropriate uses of natural and synthetic ropes.
 - 09.03 When given the proper size and amount of rope, demonstrate tying a bowline knot, a clove hitch, rescue knot, figure of eight knot, a becket or sheet bend, and an overhand safety knot.
 - 09.04 When given the proper rope, demonstrate the bight, loop, round turn, and half hitch as used in tying knots and hitches.
 - 09.05 Using an approved knot, hoist any selected forcible entry tool, ground ladder, or appliance to a height of at least 20 feet (6m).
 - 09.06 Demonstrate the techniques of inspecting, cleaning, maintaining, and storing rope.
- 10.0 DEMONSTRATE RESCUE PROCEDURES--The student will be able to:
 - 10.01 Demonstrate the removal of injured persons from the immediate hazard by the use of carries, drags, and stretchers.
 - 10.02 Demonstrate searching for victims in burning, smoke-filled buildings, or other hostile environments.
 - 10.03 Define the uses of a life belt.
 - 10.04 Define safety procedures as they apply to rescue.
- 11.0 DEMONSTRATE SAFETY PROCEDURES--The student will be able to:
 - 11.01 Identify dangerous building conditions created by fire.
 - 11.02 Demonstrate techniques for action when trapped or disoriented in a fire situation or a hostile environment.
 - 11.03 Define procedures to be used in electrical emergencies.
 - 11.04 Define fire service lighting equipment.
 - 11.05 Identify safety procedures when using fire service lighting equipment.
 - 11.06 Demonstrate use of portable power plants, lights, cords, and connectors.
 - 11.07 Define safety procedures as they apply to emergency operations. The specific areas to be defined are: (a) protective equipment; (b) team concept; (c) portable tools and equipment; (d) riding an apparatus; (e) hazardous materials incidents.
- 12.0 USE LADDERS--The student will be able to:
 - 12.01 Identify each type of ladder and define its use.
 - 12.02 Operating as an individual and as a member of a team, demonstrate the following ladder carries: (a) one person

- carry; (b) two person carry; (c) three person carry; (d) four person carry; (e) five person carry; (f) six person carry.
- 12.03 Operating as an individual and as a member of a team, raise each type of size of ground ladder using several different raises for each ladder.
- 12.04 Climb the full length of every type of ground and aerial ladder.
- 12.05 Climb the full length of each type of ground and aerial ladder carrying fire fighting tools or equipment while ascending and descending.
- 12.06 Climb the full length of each type of ground and aerial ladder and bring an "injured person" down the ladders.
- 12.07 Demonstrate the techniques of working from ground or aerial ladders with tools and appliances, with and without a life belt.
- 12.08 Demonstrate the techniques of cleaning ladders.
- 13.0 USE FIRE HOSE, NOZZLES, AND APPLIANCES--The student will be able to:
- 13.01 Identify the sizes, types, amounts, and use of hose carried on a pumper.
- 13.02 Demonstrate the use of nozzles, hose adaptors, and hose appliances carried on a pumper.
- 13.03 When given the necessary equipment and operating as an individual and as a member of a team, advance dry hose lines of two different sizes, both of which shall be 1 1/2 inch or larger, from a pumper: (a) into a structure; (b) up a ladder into an upper floor window; (c) up an inside stairway to an upper floor; (d) up an outside stairway to an upper floor; (e) down an inside stairway to a lower floor; (f) down an outside stairway to a lower floor; (g) to an upper floor by hoisting.
- 13.04 When given the necessary equipment and operating as a member of a team, advance charged attack lines of two different sizes, both which shall be 1 1/2 inch or larger, from a pumper: (a) into a structure; (b) up a ladder into an upper floor window; (c) up an outside stairway to an upper floor; (d) up an inside stairway to an upper floor; (e) down an inside stairway to a lower floor; (f) down an outside stairway to a lower floor; (g) to an upper floor by hoisting.
- 13.05 Demonstrate the techniques for cleaning fire hose, couplings, and nozzles; and inspecting for damage.
- 13.06 Connect a fire hose to a hydrant, and fully open and close the hydrant.
- 13.07 Demonstrate the loading of fire hose on a fire apparatus and identify the purpose of at least three types of hose loads and finishes.
- 13.08 Demonstrate three types of hose rolls.
- 13.09 Demonstrate two types of hose carries.
- 13.10 Demonstrate coupling and uncoupling fire hose.
- 13.11 Work from a ladder with a charged attack line, which shall be 1 1/2 inch or larger.
- 13.12 Demonstrate the techniques of carrying hose into a building to be connected to a standpipe, and of advancing a hose line from a standpipe.

- 13.13 Demonstrate the methods for extending a hose line.
- 13.14 Demonstrate replacing a burst section of hose line.

14.0 USE FIRE STREAMS--The student will be able to:

- 14.01 Define a fire stream.
- 14.02 Manipulate a nozzle so as to attack a Class A fire and a Class B fire.
- 14.03 Define water hammer and at least one methods for its prevention.
- 14.04 Demonstrate how to open and close a nozzle.

15.0 USE WATER SUPPLIES--The student will be able to:

- 15.01 Identify the water distribution system, and other water sources in the local community.
- 15.02 Identify the following parts of a water distribution system: (a) distributors, (b) primary feeders, (c) secondary feeders.
- 15.03 Identify a: (a) dry-barrel hydrant, (b) wet-barrel hydrant.
- 15.04 Identify the following: (a) normal operating pressure of a water distribution system, (b) residual pressure of a water distribution system, (c) flow pressure from an opening that is flowing water.
- 15.05 Identify the following types of main water valves: (a) indicating, (b) nonindicating, (c) post indicator, (d) outside screw and yoke.
- 15.06 Identify hydrant usability by: (a) obstructions to use of hydrant, (b) direction of hydrant outlets to suitability of use, (c) mechanical aboveground damage, (d) condition of paint for rust and corrosion, (e) the flow by fully opening the drain, (f) ability to drain.
- 15.07 Define a tanker shuttle.
- 15.08 Identify the apparatus, equipment, and appliances required to provide water at rural locations by relay pumping, large diameter hose, or a tanker shuttle.
- 15.09 Demonstrate deployment of a portable water tank.

16.0 USE SPRINKLER SYSTEMS--The student will be able to:

- 16.01 Identify a fire department sprinkler connection and water motor alarm.
- 16.02 Connect hose line(s) to a fire department connection of a sprinkler orstandpipe system.
- 16.03 Define how the automatic sprinkler heads open and release water.
- 16.04 Temporarily stop the flow of water from a sprinkler head.

17.0 DEMONSTRATE SALVAGE PROCEDURES--The student will be able to:

- 17.01 Identify the purpose of salvage and its value to the public and the fire department.
- 17.02 Demonstrate folds and rolls of salvage covers as an individual and as a member of a team.

- 17.03 Demonstrate salvage cover throws as an individual and as a member of a team.
- 17.04 Demonstrate the techniques of inspection, cleaning, and maintaining salvage equipment.
- 18.0 DEMONSTRATE OVERHAUL PROCEDURES--The student will be able to:
 - 18.01 Demonstrate searching for hidden fires.
 - 18.02 Demonstrate exposure of hidden fires by opening ceilings, walls, floors, and pulling apart burned materials.
 - 18.03 Demonstrate how to separate and remove charred material from unburned material.
 - 18.04 Define duties of fire fighters left at the fire scene for fire and security surveillance.
 - 18.05 Identify the purpose of overhaul.
- 19.0 FOLLOW FIRE PREVENTION INSPECTION PRACTICES--The student will be able to:
 - 19.01 Identify the common causes of fires and their prevention.
 - 19.02 Identify the fire inspection procedures.
 - 19.03 Define the importance of public relations relative to the inspection programs.
 - 19.04 Define dwelling inspection procedures.
- 20.0 DEMONSTRATE KNOWLEDGE OF THE FUNDAMENTALS OF EXTINGUISHMENT--The student will be able to:
 - 20.01 Define the fundamental steps in the process of fire extinguishment.
 - 20.02 Identify the considerations involved with various types of structural fires.
 - 20.03 List the sequence of activities involved with various amounts of fire within a structure.
 - 20.04 Identify the elements of ground cover fire.
 - 20.05 Demonstrate a knowledge of flammable liquids and gases.
 - 20.06 Identify the fire fighting techniques employed in combating flammable liquid and gases.
- 21.0 FOLLOW HEALTH AND HUMAN RELATIONS PRACTICES--The student will be able to:
 - 21.01 Apply infection control measures in accordance with Centers for Disease Control (CDC) guidelines.
 - 21.02 Recognize and report signs of abuse and neglect.
- 22.0 PARTICIPATE IN FIRE TRAINING EXAMINATIONS--The student will be able to:
 - 22.01 Take a test (written/oral) on each academic portion of the outline.
 - 22.02 Take a performance test on certain portions of the outline.
- 23.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES, INCLUDING AIDS--The student will be able to:

- 23.01 Distinguish between fact and fallacy about the transmission and treatment of sexually transmitted diseases including HIV infection.
 - 23.02 Identify community resources and services available to the victims of sexually transmitted diseases.
 - 23.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of sexually transmitted diseases.
 - 23.04 Apply infection control techniques designed to prevent the spread of sexually transmitted diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
 - 23.05 Demonstrate knowledge of legal aspects of AIDS.
- 24.0 DEMONSTRATE VARIOUS METHODS OF COMMUNICATION--The student will be able to:
- 24.01 Define unfamiliar firefighting terms by use of structural analysis, decoding, contextual clues or by using a dictionary.
 - 24.02 Distinguish factual reports and personal opinion.
 - 24.03 Demonstrate ability to report observations in written or oral form.
- 25.0 DEMONSTRATE APPLICATION OF KNOWLEDGE OF BASIC MATH SKILLS--The student will be able to:
- 25.01 Draw, read, and analyze and report on graphs, charts, and tables.
 - 25.02 Measure time, temperature, distance, capacity and mass/weight.
 - 25.03 Make and use measurements in both traditional and metric units.
 - 25.04 Make estimates and approximations and judge the reasonableness of the result.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Wastewater Treatment Plant Operation - Level C
Occupational Area: Public Service Occupations

PSAV

Program Numbers F150526
CIP Number 0715.050602
Grade Level 30, 31
Length 150 hours
Certification WSP OPER @7 G
TEC CHEM @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for entry level positions in a wastewater treatment facility. The program is designed to prepare students for certification as domestic wastewater treatment facility operators in accordance with Chapter 17-602, F.A.C., as approved by the Florida Department of Business and Professional Regulation (DBPR). Education and training are offered at three levels to prepare individuals for the C, B, and A levels of Wastewater Treatment Facility Operator Certification. The C level is the fundamental level of training. Students are introduced to the principles of wastewater treatment, operation and maintenance of treatment facility equipment, and full range of process control procedures. Since C-level training covers a broad range of subjects that may be entirely new to the student, the amount of detail is limited. Therefore, the C level is the core, in terms of the depth of study, but is actually comprehensive in terms of the range of operating skills covered.

It is recommended that a student entering the B-level program be able to demonstrate the skills and knowledge covered in the level C (core) program.

The B-level program is the intermediate level. At this level, the student should be familiar with plans and operations. Emphasis is on operational process control, trouble-shooting techniques, and supervision.

The A-level is the most advanced level and the application of problem-solving skills and the development of supervisory and management skills are emphasized.

The content for level C includes, but is not limited to, wastewater characteristics; sampling and testing; equipment maintenance and inspection; operational control; digestion and solids management; disinfection; basic hydraulics; microbiology; wastewater treatment techniques; and instrumentation and treatment process control. The emphasis will be on skills that are necessary for effective treatment process control. All of the training levels will emphasize the activated sludge process and its modifications. Trickling-filter,

rotating biological-contractor, oxidation-ditch, and phosphorus/nitrogen removal-pond operations may also be covered.

Reinforcement of basic skills in English, mathematics, and science appropriate for these job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** In-facility testing and treatment activities are an integral part of this program. Laboratory analysis is recommended. Interpretation of lab results is stressed.
- III. **SPECIAL NOTE:** Wastewater Treatment Facility Operator certificates are available in levels A, B, and C from the Department of Business and Professional Regulation for those who complete the required program, have the required work experience, and pass the appropriate certification examination.

Guest speakers and field trips are important contributions to the program. Supplemental training is available through the Florida Water and Pollution Control Operators Association.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment skills, and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 150 hours level C.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the C-level student will be able to:
 - 01.0 Identify the basic characteristics and principles of wastewater treatment.
 - 02.0 Identify sampling techniques and interpret results.
 - 03.0 Solve basic arithmetic problems common in wastewater treatment-facility operation.

- 04.0 Describe the sources of wastewater and types of collection systems.
- 05.0 Describe process and operation principles for: preliminary, primary, secondary and tertiary treatment (the treatment train); effluent disposal, and solids management.
- 06.0 Perform treatment process control for the treatment train, effluent disposal, and solids management.
- 07.0 Perform equipment inspection and identify basic maintenance for the treatment train, effluent disposal, and solids management.
- 08.0 Identify and correct facility operational problems.
- 09.0 Identify and follow appropriate Department of Environmental Regulation and Environmental Protection Agency rules.
- 10.0 Describe and follow federal, state, and local laws for handling storage, and use of toxic and hazardous materials.
- 11.0 Demonstrate employability skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Wastewater Treatment Plant Operation - Level C
Secondary Number:
Postsecondary Number: P150526

01.0 IDENTIFY THE BASIC CHARACTERISTICS AND PRINCIPLES OF WASTEWATER TREATMENT--The student will be able to:

- 01.01 Identify the sources of wastewater and the objectives of wastewater treatment.
- 01.02 Identify terms used in wastewater treatment.
- 01.03 Identify the impact of wastewater on receiving bodies of water.
- 01.04 Correlate treatment processes to types of facility influent and solids.
- 01.05 Identify biological organisms used in treatment processes.
- 01.06 Identify commonly measured wastewater items.
- 01.07 Identify factors affecting raw wastewater.
- 01.08 Identify waterborne diseases.
- 01.09 Identify gases found in wastewater.

02.0 IDENTIFY SAMPLING TECHNIQUES AND INTERPRET THE RESULTS--The student will be able to:

- 02.01 Identify the reasons for sampling and the types of samples (e.g., simple, representative, grab, composite).
- 02.02 Describe methods of sample collection and handling.
- 02.03 Identify specific samples (biological or chemical) required for process control and for compliance with standards.
- 02.04 Identify representative sampling points.
- 02.05 Determine the significance of sample results (biological or chemical) for process control and for reporting.
- 02.06 Identify the basic procedure for quality control/quality assurance in sampling.
- 02.07 Identify the significance of the flow measurement on process control.

03.0 SOLVE BASIC ARITHMETIC PROBLEMS COMMON IN WASTEWATER-TREATMENT-FACILITY OPERATION--The student will be able to:

- 03.01 Perform basic arithmetic problems (e.g., addition, subtraction, multiplication, division, fractions, decimals, rounding, graphing).
- 03.02 Identify metric measurements and perform conversions.
- 03.03 Perform algebraic calculations essential to wastewater treatment, given values for variables.

04.0 DESCRIBE THE SOURCES OF WASTEWATER AND THE TYPES OF COLLECTION SYSTEMS--The student will be able to:

- 04.01 Describe the types of wastewater collection systems.

- 04.02 Identify flow variations and conditions that affect plant treatment, including infiltration, inflow, and lift stations.
 - 04.03 Identify methods to detect and correct infiltration.
 - 04.04 Identify dissolved gases in wastewater and the effect of their presence/absence on treatment.
- 05.0 DESCRIBE THE PROCESS AND THE OPERATIONAL PRINCIPLES FOR THE PRELIMINARY, PRIMARY, SECONDARY, AND TERTIARY TREATMENT (THE TREATMENT TRAIN); EFFLUENT DISPOSAL; AND SOLIDS MANAGEMENT--The student will be able to:
- 05.01 Describe concepts related to preliminary and primary treatment.
 - 05.02 Describe the types of preliminary-treatment equipment, the way they function, and the relationship of each to the treatment train.
 - 05.03 Describe the types of primary-treatment equipment, the way they function, and the relationship of each to the treatment train.
 - 05.04 Describe concepts related to secondary treatment, including attached growth, aeration, and clarification.
 - 05.05 Describe the types of secondary-treatment equipment, the way they function, and the relationship of each to the treatment train.
 - 05.06 Describe concepts related to tertiary-treatment processes, including sand filtration, nitrification/denitrification, oxic/anoxic, activated carbon, and artificial wetlands.
 - 05.07 Describe the types of tertiary-treatment equipment, the way they function, and the relationship of each to the treatment train.
 - 05.08 Describe concepts related to disinfection and effluent disposal, including surface water, reuse reclamation, deep well, and ocean outfall.
 - 05.09 Describe the types of disinfection and the types of effluent-disposal equipment, the way they function, and the relationship of each to the system.
 - 05.10 Describe concepts related to solids management, including thickening, aerobic and anaerobic digestion, stabilization, dewatering, and reuse.
 - 05.11 Describe the types of solids-management equipment, the way they function, and the relationship of each to the system.
- 06.0 PERFORM TREATMENT-PROCESS CONTROL FOR THE TREATMENT TRAIN, EFFLUENT DISPOSAL, AND SOLIDS MANAGEMENT--The student will be able to:
- 06.01 Describe the grit-removal process and the operational efficiency of each step.
 - 06.02 Describe the laboratory tests performed on influent.
 - 06.03 Describe the primary-clarifier removal efficiencies, including settleable solids, suspended solids, total solids, BOD, and bacteria.
 - 06.04 Describe sampling points, frequency of sampling, and the laboratory tests and results that are used for the proper operation of the primary clarifier.
 - 06.05 Select and plot on a trend chart the parameters for primary clarification.

- 06.06 Use the operational data required to evaluate the performance of secondary-treatment processes, including attached growth, suspended growth, aeration, and clarification.
- 06.07 Describe sampling points, the frequency of sampling, and the laboratory tests and results used for proper operation of the secondary-treatment processes.
- 06.08 Select and plot on a trend chart the parameters for secondary clarification.
- 06.09 Use operational data to evaluate the performance of tertiary-treatment processes, including sand filtration, phosphorus removal, and nitrogen removal.
- 06.10 Describe sampling points, the frequency of sampling, and the laboratory tests and results used for checking the proper operation of tertiary treatment.
- 06.11 Select and plot on a trend chart the parameters for tertiary treatment.
- 06.12 Use operational data to evaluate the performance of effluent-disposal processes, including disinfection and dechlorination.
- 06.13 Describe sampling points, the frequency of sampling, and the laboratory tests used for checking the proper operation of effluent disposal.
- 06.14 Select and plot on a trend chart the parameters for effluent disposal.
- 06.15 Describe the chemical and physical properties of chlorine, and describe the reactions of chlorine with water, ammonia compounds, and sulfides.
- 06.16 Describe the safe storage and handling of chlorine, including the use of testing compounds.
- 06.17 Explain the points of application of chlorine in wastewater treatment.
- 06.18 Describe the methods of dechlorination.
- 06.19 Describe the methods commonly used to dispose of wastewater effluents, including reuse applications.
- 06.20 Describe the laboratory tests commonly used on the reuse of effluent.
- 06.21 Describe the types of sludge and their characteristics.
- 06.22 Use operational data to evaluate the performance of solids management, including sludge thickening, digestion, dewatering, and disposal processes.
- 06.23 Describe sampling points, the frequency of sampling, and the laboratory tests and results used for checking the proper operation of solids management.
- 07.0 PERFORM EQUIPMENT INSPECTION, AND IDENTIFY BASIC MAINTENANCE FOR THE TREATMENT TRAIN, EFFLUENT DISPOSAL, AND SOLIDS MANAGEMENT--The student will be able to:
 - 07.01 Identify the appropriate equipment used in the treatment train, effluent disposal, and solids management.
 - 07.02 Describe a preliminary site inspection of the equipment used in the treatment train, effluent disposal, and solids management.

- 07.03 Identify the maintenance needs of equipment used in the treatment train, effluent disposal, and solids management, including safe procedures for maintenance.
 - 07.04 Document the results of inspections.
 - 07.05 Describe corrective maintenance procedures for all equipment used in the treatment process, effluent disposal, and solids management.
- 08.0 IDENTIFY AND CORRECT FACILITY OPERATIONAL PROBLEMS--The student will be able to:
- 08.01 Describe common facility operational problems in the treatment train, effluent disposal, and solids management.
 - 08.02 Describe methods of checking the accuracy of observed operational problems in preliminary, primary, secondary, and tertiary treatment, effluent disposal, and solids management.
 - 08.03 Select appropriate corrective actions for common problems in preliminary, primary, secondary, and tertiary treatment, effluent disposal, and solids management.
 - 08.04 Describe the methods for monitoring results of corrective action taken for common problems in preliminary, primary, secondary, and tertiary treatment, effluent disposal, and solids management.
- 09.0 IDENTIFY AND FOLLOW APPROPRIATE DEPARTMENT OF ENVIRONMENTAL REGULATION (DER) AND ENVIRONMENTAL PROTECTION AGENCY (EPA) RULES--The student will be able to:
- 09.01 Describe the operator's duties and responsibilities, certification requirements, testing, renewal, staffing, and facility classification (sections of Chapter 17-602, F.A.C.).
 - 09.02 Apply rules concerning samples and analysis at wastewater-treatment facilities (Chapter 17-601, F.A.C.).
 - 09.03 Complete a DER monthly operating report (MOR) form correctly.
 - 09.04 Complete a National Pollution Discharge Elimination System (NPDES) MOR form.
 - 09.05 Follow DER rules that apply to procedures such as reclaimed water, reuse, and residuals management.
 - 09.06 Follow federal rules that apply to the operation of a wastewater-treatment facility.
- 10.0 DESCRIBE AND FOLLOW FEDERAL, STATE, AND LOCAL LAWS FOR THE HANDLING, STORAGE, AND USE OF TOXIC AND HAZARDOUS MATERIALS--The student will be able to:
- 10.01 Identify the kinds of information presented on the Material Safety Data Sheets.
 - 10.02 Describe requirements for in-plant training and the accessibility of information on hazardous and toxic substances (Chapter 442, F.S.).
 - 10.03 Identify the reporting requirements as specified in SARA Title III and Chapter 252, F.S.
 - 10.04 Describe the responsibilities toward the community as specified in SARA Title III and Chapter 252, F.S.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 11.01 Conduct a job search.
- 11.02 Secure information about a job.
- 11.03 Identify documents that may be required for a job application.
- 11.04 Complete a job application.
- 11.05 Demonstrate competence in job-interview techniques.
- 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate knowledge of how to make job changes appropriately.
- 11.09 Demonstrate acceptable employee-health habits for the treatment facility environment.
- 11.10 Identify materials and documents needed for a professional library.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Wastewater Treatment Plant Operation - Level B
Occupational Area: Public Service Occupations

PSAV

Program Numbers P150527
CIP Number 0715.050604
Grade Level 30, 31
Length 150 hours
Certification WSP OPER @7 G
TEC CHEM @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for entry level positions in a wastewater treatment facility. The program is designed to prepare students for certification as domestic wastewater treatment facility operators in accordance with Chapter 17-602, F.A.C., as approved by the Florida Department of Business and Professional Regulation (DBPR). Education and training are offered at three levels to prepare individuals for the C, B, and A levels of wastewater Treatment Facility Operator Certification. The C level is the fundamental level of training. Students are introduced to the principles of wastewater treatment, operation and maintenance of treatment facility equipment, and full range of process control procedures. Since C-level training covers a broad range of subjects that may be entirely new to the student, the amount of detail is limited. Therefore, the C level is the core, in terms of the depth of study, but is actually comprehensive in terms of the range of operating skills covered.

It is recommended that a student entering the B-level program be able to demonstrate the skills and knowledge covered in the level C (core) program.

The B-level program is the intermediate level. At this level, the student should be familiar with plans and operations. Emphasis is on operational process control, trouble-shooting techniques, and supervision.

The A-level is the most advanced level and the application of problem-solving skills and the development of supervisory skills are emphasized.

Reinforcement of basic skills in English, mathematics, and science appropriate for these job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

II. **LABORATORY ACTIVITIES:** In-facility testing and treatment activities are an integral part of this program. Laboratory analysis is recommended. Interpretation of lab results is stressed.

III. **SPECIAL NOTE:** Wastewater Treatment Facility Operator certificates are available in levels A, B, and C from the Department of Business and Professional Regulation for those who complete the required program, have the required work experience, and pass the appropriate certification examination.

Guest speakers and field trips are important contributions to the program. Supplemental training is available through the Florida Water and Pollution Control Operators Association.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment skills, and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 150 hours for level B.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the B-level student will be able to:

- 01.0 Analyze the constituents of wastewater and select the appropriate treatment.
- 02.0 Conduct advanced sampling techniques and interpret results.
- 03.0 Analyze the constituents of influent and its effects on the treatment process.
- 04.0 Demonstrate process optimization for preliminary, primary, secondary, and tertiary treatment (the treatment train); effluent disposal, and solids management.
- 05.0 Perform advanced treatment process control for the treatment train, effluent disposal, and solids management.
- 06.0 Perform advanced equipment inspection and preventive maintenance for the treatment train, effluent disposal, and solids management.
- 07.0 Analyze and correct facility operational problems.
- 08.0 Identify and follow appropriate Department of Environmental Protection Agency Rules.
- 09.0 Follow, federal, state, and local laws concerning the management, storage, and use of toxic and hazardous materials.

- 10.0 Describe energy conservation and identify ways to conserve energy in the wastewater treatment facility.
- 11.0 Demonstrate supervisory skills.
- 12.0 Demonstrate employability skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Wastewater Treatment Plant Operation - Level B
Secondary Number:
Postsecondary Number: P150527

01.0 ANALYZE THE CONSTITUENTS OF WASTEWATER, AND SELECT THE APPROPRIATE TREATMENT--The student will be able to:

- 01.01 Analyze the specific physical, chemical, and biological characteristics of wastewater.
- 01.02 Analyze attached and suspended growth, respiration, gas production, aerobic and anaerobic conditions, differences in effluent disposal, and solids management.
- 01.03 Identify ranges in wastewater treatment and limits on facility discharges.

02.0 IDENTIFY ADVANCED SAMPLING TECHNIQUES AND INTERPRET THE RESULTS--The student will be able to:

- 02.01 Describe the chain of custody for a sample.
- 02.02 Describe the preservation of samples.
- 02.03 Develop standard operating procedures for taking samples for process control and for compliance with standards.
- 02.04 Identify microorganisms present in wastewater, and discuss the significance of changes in their populations.
- 02.05 Describe laboratory quality-control/quality-assurance procedures and required documentation.
- 02.06 Explain the reasons for measuring the flows of treated and untreated wastewater, and the effects of those flows on process control.

03.0 ANALYZE THE CONSTITUENTS OF INFLUENT AND ITS EFFECTS ON THE TREATMENT PROCESS--The student will be able to:

- 03.01 Explain the significance of dissolved gases in the influent and the effects of dissolved gases on treatments.
- 03.02 Explain the sources of infiltration and inflow, and discuss the effects of infiltration and inflow on treatment processes.
- 03.03 Describe methods to detect and correct infiltration and inflow.
- 03.04 Explain the effect of lift-station performance on the overall treatment process.
- 03.05 Describe solutions for lift-station problems, such as surging flows, septic conditions, and power outages.

04.0 DEMONSTRATE PROCESS OPTIMIZATION FOR PRELIMINARY, PRIMARY, SECONDARY, AND TERTIARY TREATMENT (THE TREATMENT TRAIN); EFFLUENT DISPOSAL; AND SOLIDS MANAGEMENT--The student will be able to:

- 04.01 Interpret laboratory data commonly obtained on incoming wastewater to monitor the efficacy of the selected treatment.

- 04.02 Describe possible adjustments to achieve process optimization for handling influent.
 - 04.03 Interpret laboratory data commonly obtained on wastewater during primary treatment to monitor the efficacy of the selected treatment.
 - 04.04 Describe possible adjustments to achieve process optimization for handling primary treatment.
 - 04.05 Interpret laboratory data commonly obtained on wastewater during secondary treatment to monitor the efficacy of the selected treatment.
 - 04.06 Describe possible adjustments to achieve process optimization for secondary treatment.
 - 04.07 Interpret laboratory data commonly obtained on wastewater during tertiary treatment to monitor the efficacy of the selected treatment.
 - 04.08 Describe possible adjustments to achieve process optimization for tertiary treatment.
 - 04.09 Interpret laboratory data commonly obtained on reclaimed water during disinfection and disposal to monitor the efficacy of the selected treatment.
 - 04.10 Describe possible adjustments to achieve process optimization for disinfection and disposal processes.
 - 04.11 Interpret laboratory data commonly obtained during solids management, including solids-content tests, to monitor the efficacy of the selected treatment.
 - 04.12 Describe possible adjustments to achieve process optimization in solids management.
 - 04.13 Selected the proper disposal of solids, based on the analysis of constituents, including all accountability records, and the costs.
- 05.0 PERFORM ADVANCED TREATMENT PROCESS CONTROL FOR THE TREATMENT TRAIN, EFFLUENT DISPOSAL, AND SOLIDS MANAGEMENT--The student will be able to:
- 05.01 Describe concepts related to advanced laboratory tests taken in the primary sedimentation tank.
 - 05.02 Describe concepts related to advanced laboratory tests taken in the secondary-treatment processes.
 - 05.03 Describe concepts related to advanced laboratory tests taken in advanced or tertiary treatment.
 - 05.04 Describe concepts related to advanced laboratory tests for disinfection, effluent disposal, and solids management.
 - 05.05 Demonstrate techniques of trend analysis.
- 06.0 PERFORM ADVANCED EQUIPMENT INSPECTION AND PREVENTIVE MAINTENANCE FOR THE TREATMENT TRAIN, EFFLUENT DISPOSAL, AND SOLIDS MANAGEMENT--The student will be able to:
- 06.01 Develop preventive maintenance plans for equipment used in preliminary-, primary-, secondary-, and tertiary-treatment processes, and for equipment used in effluent disposal and solids management.

- 06.02 Demonstrate trends analysis used in preventive maintenance planning for all treatment processes, effluent disposal, and solids management.
- 06.03 Prepare a training plan for employees on preliminary site inspection.
- 06.04 Describe the monitoring of facility equipment operation and usage with remote sensing equipment.
- 07.0 ANALYZE AND CORRECT FACILITY OPERATIONAL PROBLEMS--The student will be able to:
 - 07.01 Demonstrate troubleshooting techniques to locate operational problems.
 - 07.02 Describe advanced methods of checking the accuracy of observed operational problems.
 - 07.03 Select appropriate corrective actions for advanced operational problems.
 - 07.04 Describe advanced methods of monitoring results of corrective actions taken.
 - 07.05 Describe actions that should be taken to prevent recurrence of identified advanced operational problems.
- 08.0 IDENTIFY AND FOLLOW APPROPRIATE DEPARTMENT OF ENVIRONMENTAL REGULATION (DER) AND ENVIRONMENTAL PROTECTION AGENCY (EPA) RULES--The student will be able to:
 - 08.01 Describe supervisory tasks related to duties, responsibilities, certification requirements, testing, renewal, staffing, and facility classification (Chapter 17-602, F.A.C.).
 - 08.02 Apply rules concerning samples and analyses at wastewater-treatment facilities (Chapter 17-601, F.A.C.).
 - 08.03 Complete the DER monthly operating report (MOR) form correctly.
 - 08.04 Complete a National Pollution Discharge Elimination System (NPDES) MOR form.
 - 08.05 Follow DER rules that apply to procedures such as reclaiming and reusing water and managing residuals.
 - 08.06 Follow federal rules that apply to the operation of a wastewater-treatment facility.
- 09.0 DESCRIBE AND FOLLOW FEDERAL, STATE, AND LOCAL LAWS FOR THE HANDLING, STORAGE, AND USE OF TOXIC AND HAZARDOUS MATERIALS--The student will be able to:
 - 09.01 Identify the kinds of information presented on the Material Safety Data Sheets.
 - 09.02 Describe requirements for in-plant training and the accessibility of information on hazardous and toxic substances (Chapter 442, F.S.).
 - 09.03 Identify the reporting requirements as specified in SARA Title III and Chapter 252, F.S.
 - 09.04 Describe the responsibilities toward the community as specified in SARA Title III and Chapter 252, F.S.

10.0 DESCRIBE ENERGY CONSERVATION, AND IDENTIFY WAYS TO CONSERVE ENERGY IN THE WASTEWATER-TREATMENT FACILITY--The student will be able to:

- 10.01 Identify the causes of energy loss.
- 10.02 Rank various pieces of equipment in order of energy consumption.
- 10.03 Describe procedures for performing an energy survey.
- 10.04 Describe methods to conserve energy, such as equipment and process adjustments.

11.0 DEMONSTRATE SUPERVISORY SKILLS--The student will be able to:

- 11.01 Identify supervisory skills and various leadership styles.
- 11.02 Delegate responsibility and assign tasks to employees.
- 11.03 Follow the proper procedure for handling employee grievances.
- 11.04 Follow the proper procedure for disciplining employees.
- 11.05 Follow staffing guidelines in planning.
- 11.06 Conduct an orientation of a new employee, and follow the training program.
- 11.07 Evaluate employees objectively.
- 11.08 Identify emergency situations and respond appropriately.
- 11.09 Identify the components of the budgeting process.
- 11.10 Demonstrate inventory control procedures.
- 11.11 Explain the importance of ethics in supervision.
- 11.12 Identify the role of the supervisor in a facility safety program.
- 11.13 Identify the role of the supervisor in customer relations.

12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 12.01 Conduct a job search.
- 12.02 Secure information about a job.
- 12.03 Identify documents that may be required for a job application.
- 12.04 Complete a job application.
- 12.05 Demonstrate competence in job-interview techniques.
- 12.06 Identify appropriate responses to criticism from employers, supervisors, or others.
- 12.07 Identify acceptable work habits.
- 12.08 Demonstrate knowledge of how to make job changes appropriately.
- 12.09 Demonstrate acceptable employee health habits for the treatment facility environment.
- 12.10 Identify the materials and documents needed for a professional library.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Water and Wastewater Technology
Occupational Area: Public Service Occupations

PSV

CIP Number 0715.050600
Grade Level College Credits
Length AS Degree/64 Hours

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as manager of a water or a wastewater treatment plant (industry title), or water and wastewater laboratory, or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, basic hydraulics, plant mathematics, lab tests, microbiology for water and wastewater, sanitary chemistry, water supply, wastewater treatment, water purification, instrumentation and controls, codes and regulations pertaining to water and wastewater, industrial organizations, collection and distribution systems, drafting, technical reporting, water plant operations and control, wastewater plant operations and control, plant maintenance, management, surveying, employability skills, leadership and human relations skills, and health and safety, including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and plant activities are essential for this program.
- III. **SPECIAL NOTE:** The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01.0 Manage a water treatment plant or a wastewater treatment plant, or water and wastewater laboratory.
- 02.0 Use computer technology monitoring equipment.
- 03.0 Prepare budgets.
- 04.0 Assign personnel.
- 05.0 Establish policies governing occupation within regulatory guidelines.
- 06.0 Demonstrate employability skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Water And Wastewater Technology
Secondary Number:
Postsecondary Number: 0715.050600

01.0 MANAGE/SUPERVISE A WATER TREATMENT PLANT OR A WASTEWATER TREATMENT PLANT, OR WATER AND WASTEWATER LABORATORY--The student will be able to:

- 01.01 Recognize the special problems that can arise under different emergency situations.
- 01.02 Demonstrate knowledge of how to deal with these problems and equipment for carrying out emergency decontamination procedures.
- 01.03 Select from alternative factors those important in efficient stores control.
- 01.04 Identify actions that a supervisor should take to handle personnel grievances.
- 01.05 Select characteristics that are important in supervisory personnel.
- 01.06 Identify steps that should be taken in handling customer complaints properly.
- 01.07 Select the steps that should be included in a plant safety program.
- 01.08 Select the steps that should be included to establish a maintenance program.
- 01.09 Select from alternative steps which should be taken to correct an operational problem.

02.0 USE COMPUTER TECHNOLOGY MONITORING EQUIPMENT--The student will be able to:

- 02.01 Select alternative statements about the benefits automation can bring to plant operation.
- 02.02 Identify the major users of automated equipment.
- 02.03 Identify the major applications of automation.

03.0 PREPARE BUDGETS--The student will be able to:

- 03.01 Select statements about budget related activities.
- 03.02 Select categories of expense accounts that are kept by utilities.
- 03.03 Select factors that are needed to maintain adequate control over supplies on hand and on order.

04.0 ASSIGN PERSONNEL--The student will be able to:

- 04.01 Identify actions that should be taken to handle grievances.
- 04.02 Select information that a supervisor should give new employees for orientation.
- 04.03 Identify job positions within the treatment plant and assign appropriate personnel to these positions.

04.04 Identify control factors that should be important in an organization plan, setting limits on delegated authority.

05.0 ESTABLISH POLICIES GOVERNING OCCUPATION WITHIN REGULATORY GUIDELINES--
The student will be able to:

- 05.01 Outline reasons for keeping accurate records.
- 05.02 Select important points in established state rules for microbiological monitoring and chemical analysis.
- 05.03 List statements of the responsibilities of utility personnel that relate to emergency conditions in the communities they serve.

06.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 06.01 Conduct a job search.
- 06.02 Secure information about a job.
- 06.03 Identify documents that may be required when applying for a job.
- 06.04 Complete a job application.
- 06.05 Demonstrate competence in job interview techniques.
- 06.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 06.07 Identify acceptable work habits.
- 06.08 Demonstrate knowledge of how to make job changes appropriately.
- 06.09 Demonstrate acceptable employee health habits.

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Water Treatment Plant Operation - Level C
Occupational Area: Public Service Occupations

PSAV

Program Numbers P150528
CIP Number 0715.050601
Grade Level 30, 31
Length 144 hours
Certification TEC CHEM @7 G
WSP OPER @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as water treatment facility operators (50144025), or to provide supplemental training for persons previously or currently employed as water treatment facility operators in accordance with Chapter 17-550, 555, 560, and 17-602, F.A.C. as approved by the Florida Department of Business and Professional Regulations. The program is offered at three levels to prepare individuals for the C, B, and A levels of Water Treatment Facility Operator Certification. The C-level is the fundamental level of training, students are introduced to the principles of water treatment, operation and maintenance of treatment facility equipment, and a full-range of process control procedures. Since C-level training covers a broad range of subjects which may be entirely new to the student, the amount of detail which can be taught is limited. Therefore, the C-level is the fundamental level in terms of the depth of study, but is actually comprehensive in terms of the range of facility operating skills covered.

The B-level is the intermediate level of training. At the B-level the student should already be familiar with plans and operations. Emphasis will be on developing a more thorough understanding of operational process control. The A-level is the most advanced level and preparation for it will emphasize the application of problem solving skills through facility management. This management level course is separate.

The content covered in the three levels includes, but is not limited to, source water characteristics; water treatment facility orientation; water quality and identification; disinfection; water treatment processes and operational techniques; sampling, testing, and laboratory analysis; supervision; operation maintenance and inspection of facility equipment; application of current Department of Environmental Protection (DEP) regulations and standards; facility administration and management techniques; and troubleshooting operational control problems. The emphasis is on skills that are needed for effective treatment process control. The program emphasizes lime softening and includes reverse osmosis.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and water treatment facility activities are an integral part of this program. In-plant testing and treatment process activities are essential.
- III. **SPECIAL NOTE:** Water Treatment Facility Operator certificates are available in levels A, B, and C from the Department of Business and Professional Regulation, upon passing the appropriate certification examination after completion of the required course and work experience. Guest speakers and field trips are important contributions to the program. Supplemental training is available through the Florida Water and Pollution Control Operators Association.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: A training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 144 hours for each level.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the C-level student will be able to:
- 01.0 Identify the basic characteristics and principles of water and its treatment.
 - 02.0 Identify sampling techniques and interpret results.
 - 03.0 Demonstrate competency in solving basic arithmetic problems common in the operation of water treatment facilities.
 - 04.0 Identify chemical, biological, and physical constituents of water entering the water treatment facility or distribution systems.
 - 05.0 Describe the principles and operational practices of the aeration process.
 - 06.0 Describe the principles and operational practices of mixing, coagulation, and flocculation.

- 07.0 Describe the principles and operational practices of the sedimentation process.
- 08.0 Describe the principles and operational practices of the filtration process.
- 09.0 Describe the principles and operational practices of water softening.
- 10.0 Describe the principles and operational practices of the stabilization process.
- 11.0 Describe the principles and operational practices of corrosion control.
- 12.0 Describe the principles and operational practices of the disinfection process.
- 13.0 Describe the principles and operational practices for control and treatment of trihalomethanes.
- 14.0 Describe the principles and operational practices of the iron and manganese removal processes.
- 15.0 Describe the principles and operational practices for taste and odor control.
- 16.0 Describe the principles and operational practices of the demineralization processes.
- 17.0 Describe the principles and operational practices of the fluoridation process.
- 18.0 Identify and correct facility operational problems.
- 19.0 Describe basic hydraulics and pumping operations.
- 20.0 Identify and follow appropriate DEP rules for operation and maintenance of a public potable water facility.
- 21.0 Describe and follow federal, state, and local laws concerning the handling, storage, and use of toxic and hazardous materials.
- 22.0 Demonstrate employability skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Water Treatment Plant Operations - Level C
Secondary Number:
Postsecondary Number: P150528

01.0 IDENTIFY THE BASIC CHARACTERISTICS AND PRINCIPLES OF WATER TREATMENT--

The student will be able to:

- 01.01 Describe the hydrologic cycle.
- 01.02 Determine which constituents are inherent to groundwater and/or surface water.
- 01.03 Describe the basic concepts of the pH scale and its importance in the water-treatment process.

02.0 IDENTIFY SAMPLING TECHNIQUES AND INTERPRET THE RESULTS--The student will be able to:

- 02.01 Identify the laboratory tests that are commonly performed by operators in Florida water-treatment facilities.
- 02.02 Describe the laboratory test performed for the presence of bacteria.
- 02.03 Describe the correct procedure for obtaining a bacteriological sample.
- 02.04 Describe the correct procedure for obtaining sample selection.
- 02.05 Define the chain of custody for a sample.
- 02.06 Describe correct sample-collection procedures for inorganic and organic analyses.
- 02.07 Describe the need for chemical analyses in water treatment.
- 02.08 Determine whether the finished water is acceptable or unacceptable, according to laboratory results.

03.0 SOLVE BASIC ARITHMETIC PROBLEMS COMMON IN THE OPERATION OF WATER-TREATMENT FACILITIES--The student will be able to:

- 03.01 Perform basic arithmetic problems, including addition, subtraction, multiplication, division, fractions, decimals, rounding, graphing, etc.
- 03.02 Identify metric measurements and perform conversions.
- 03.03 Perform algebraic calculations essential to water treatment, when given values for components.

04.0 IDENTIFY CHEMICAL, BIOLOGICAL, AND PHYSICAL CONSTITUENTS OF WATER ENTERING THE WATER-TREATMENT FACILITY OR DISTRIBUTION SYSTEMS--The student will be able to:

- 04.01 Describe the relationship between turbidity and the microbiological quality of water.
- 04.02 Describe the uses of chemical analysis in water-treatment operations.
- 04.03 Identify symbols and common names for elements and chemical compounds.

- 04.04 Select the primary constituents to be measured and the most commonly used units of measurement for each.
- 04.05 Explain the importance of water treatment for the control of coliform bacteria and algae.
- 05.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE AERATION PROCESS--The student will be able to:
 - 05.01 Describe the aeration and air stripping, and explain how they differ.
 - 05.02 Identify the types of aeration systems.
 - 05.03 Identify the benefits of aeration.
 - 05.04 Describe the components of an air-stripping system.
- 06.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE MIXING, COAGULATION, AND FLOCCULATION PROCESSES--The student will be able to:
 - 06.01 Define concepts such as turbidity, color, coagulation, and flocculation.
 - 06.02 Identify the kinds of equipment used in the coagulation process.
 - 06.03 Identify coagulant chemicals used in water-treatment facilities.
 - 06.04 Identify the steps of coagulation, in order.
 - 06.05 Identify the specific sampling locations for process control in a coagulation process.
 - 06.06 Identify factors that would contribute to poor floc formation.
 - 06.07 Compute the feed rate in pounds per day (lbs/d) when the chemical coagulant (mg/l) and flow rate (MGD) are known.
 - 06.08 Compute the dosage (mg/l) of coagulant when the rate of flow (MGD) and the feed rate (lbs/day) of the chemical coagulant are known.
 - 06.09 Compute the dosage rate that is needed to treat a different flow (MGD) at the current dosage when the current rate of flow (MGD) and the current coagulant feed rate (lbs/d) are known.
- 07.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE SEDIMENTATION PROCESS--The student will be able to:
 - 07.01 Describe an upflow clarifier and basin sedimentation.
 - 07.02 Identify factors that affect efficient sedimentation.
 - 07.03 Identify the measures that would be effective in preventing or controlling algal growth on surfaces of coagulation and sedimentation basins.
 - 07.04 Identify methods of sludge removal from sedimentation basins.
- 08.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE FILTRATION PROCESS--The student will be able to:
 - 08.01 Explain concepts related to filtration, including types of filters, filter-system components, and the steps for normal filtration operations.
 - 08.02 Explain common problems of filtering systems, including head loss, mudballs, and filter media loss.

- 08.03 Determine when to backwash a filter.
- 08.04 Identify the steps for backwashing a filter.
- 09.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE WATER-SOFTENING PROCESS--The student will be able to:
 - 09.01 Identify treatment processes used for water softening.
 - 09.02 Describe the two types of hardness.
 - 09.03 Describe alkalinity and its components.
 - 09.04 Calculate the distribution of bicarbonate, carbonate, and/or hydroxide ions when given the total alkalinity and phenolphthalein alkalinity.
 - 09.05 Describe selective carbonate removal.
 - 09.06 Identify the important zones of an upflow clarifier unit.
 - 09.07 Identify the appropriate chemical(s) to use in chemical-precipitation softening processes for the two kinds of hardness.
 - 09.08 Describe the lime-soda ash-softening process, including its control.
 - 09.09 Compute lime demand from raw-water analyses.
 - 09.10 Describe the reasons for recarbonization.
 - 09.11 Compute hardness removal when the ion-exchange capacity is known.
- 10.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE STABILIZATION PROCESS--The student will be able to:
 - 10.01 Identify the chemicals used in stabilization.
 - 10.02 Identify two stabilization indices.
 - 10.03 Determine water stability, using the Langelier index and the marble test.
- 11.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE CORROSION-CONTROL PROCESS--The student will be able to:
 - 11.01 Describe the problems that can be created by corrosive waters.
 - 11.02 Define electrochemical reaction.
 - 11.03 Identify the factors that influence corrosion.
 - 11.04 Define cathode film formation.
 - 11.05 Describe the conditions for calcium carbonate film formation.
 - 11.06 Identify the chemicals used in corrosion control.
 - 11.07 Define cathodic protection and describe its application in water-treatment facilities.
 - 11.08 Describe the basic concepts related to electrolysis.
- 12.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE DISINFECTION PROCESS--The student will be able to:
 - 12.01 Identify the chemicals used in primary disinfection.
 - 12.02 Identify commonly used chlorinators and hypochlorinators.
 - 12.03 Determine the maximum amount of chlorine gas (in pounds) that may be taken from a cylinder in a 24-hour period.
 - 12.04 Identify proper maintenance procedures for equipment chlorination.

- 12.05 Identify terminology related to chlorination and disinfection.
 - 12.06 Identify common safety problems or emergency situations that might occur during chlorination.
 - 12.07 Identify the properties of chlorine and describe its use in water treatment.
 - 12.08 Explain the points at which chlorine is applied most effectively in water treatment.
 - 12.09 Compute the feed rate (lbs/d) when given the rate of flow (MGD) and dosage of chlorine (mg/l).
 - 12.10 Compute the feed rate (lbs/d) of a hypochlorite compound that contains a given percentage of available chlorine when given a problem where the rate of flow (MGD) and the chlorine dosage (mg/l) are known.
 - 12.11 Compute the new rate of flow and the feed rate that will be needed to maintain the current dosage when given the current rate of flow (MGD), the current chlorine feed rate (lbs/d), and the amount by which the rate of flow is to be increased or decreased.
 - 12.12 Compute the feed rate needed to treat a given amount of water when given a chlorine demand and the desired chlorine residual.
- 13.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES FOR THE CONTROL AND TREATMENT OF TRIHALOMETHANES--The student will be able to:
- 13.01 Describe the formation of total trihalomethanes (TTHM).
 - 13.02 Identify the specific procedure for collecting samples to determine trihalomethane levels.
 - 13.03 Compute the quarterly average and the annual TTHM measurements when sample results are given.
 - 13.04 Identify processes that remove trihalomethane precursors.
 - 13.05 Identify processes that remove trihalomethanes after they are formed.
 - 13.06 Identify the benefits of alternate disinfectants.
 - 13.07 Describe chloramination as a control of TTHM.
- 14.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE IRON- AND MANGANESE-REMOVAL PROCESSES--The student will be able to:
- 14.01 Describe the importance of controlling iron and manganese.
 - 14.02 Explain the occurrence of iron and manganese in source water and in treated water.
 - 14.03 Describe sample-collection and analysis procedures for iron and manganese.
 - 14.04 Describe remedial processes for controlling iron and manganese.
- 15.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES FOR TASTE AND ODOR CONTROL--The student will be able to:
- 15.01 Identify common types of complaints about water quality.
 - 15.02 Identify causes of tastes and odors.
 - 15.03 Describe how microbial growths affect tastes and odors.
 - 15.04 Describe how eutrophication contributes to surface-water tastes and odors.
 - 15.05 Describe a cross-connection.

- 15.06 Identify the chemicals used in the control and treatment of tastes and odors.
- 15.07 Describe the Threshold Odor Number (TON) test.
- 15.08 Determine the TON when dilution volumes and positive samples are given.

16.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE DEMINERALIZATION PROCESSES--The student will be able to:

- 16.01 Define concepts related to demineralization, such as reverse osmosis (RO), flux, feedwater, permeate, and salinity.
- 16.02 Describe the structure, composition, and performance of an RO membrane.
- 16.03 Describe feedwater impurities, physical parameters, and conditions potentially harmful to the RO process.
- 16.04 Identify items included in a typical RO-facility-operation checklist.
- 16.05 Describe the common causes of membrane damage.
- 16.06 Describe the procedure for membrane cleaning.
- 16.07 Compute the percent of recovery when product flow and feed flow are known.
- 16.08 Compute the percent of mineral rejection when total dissolved solids are known for the feedwater and product water.
- 16.09 Describe the basic concepts of electrodialysis (ED), such as the cathode and anode relationship and the removal of typical inorganic salts.
- 16.10 Describe the most common problem of ED operation in a facility.
- 16.11 Explain how the cation membrane and the anion membrane differ.
- 16.12 Describe the multicompartiment unit used in the ED process.
- 16.13 Describe ED operating procedures in detail.
- 16.14 Describe the two most common chemical solutions used to flush ED stack membranes.

17.0 DESCRIBE THE PRINCIPLES AND OPERATIONAL PRACTICES OF THE FLUORIDATION PROCESS--The student will be able to:

- 17.01 Define the basic concepts related to fluoridation, including its purpose and the kinds of chemicals used.
- 17.02 Identify the properties of fluoride and describe its use.
- 17.03 Identify the types of equipment used in fluoridation.
- 17.04 Describe proper maintenance procedures for fluoridation equipment.
- 17.05 Describe potential safety problems or emergency situations in the fluoridation process, and ways to avoid them.
- 17.06 Compute the feed rate of chemicals used in the fluoridation process.

18.0 IDENTIFY AND CORRECT FACILITY OPERATIONAL PROBLEMS--The student will be able to:

- 18.01 Respond to customer questions about taste or odor in the water.
- 18.02 Respond to customer questions about red water or rust stains.
- 18.03 Identify the probably cause(s) for a sudden change in chlorine demand; take corrective action.

19.0 DESCRIBE BASIC HYDRAULICS AND PUMPING OPERATIONS--The student will be about to:

- 19.01 Describe the relationship between the system head and pressure, and make conversions between them.
- 19.02 Describe three types of head, i.e., pressure, suction, and atmospheric.
- 19.03 Describe the basic hydraulic components.
- 19.04 Identify the components of a centrifugal pump and their functions.
- 19.05 Start a centrifugal pump.
- 19.06 Identify methods that are effective in preventing "water hammer."

20.0 IDENTIFY AND FOLLOW APPROPRIATE DER RULES FOR THE OPERATION AND MAINTENANCE OF A PUBLIC POTABLE-WATER FACILITY--The student will be able to:

- 20.01 Complete the Drinking Water Bacteriological Analysis form correctly.
- 20.02 Complete the DER daily operation report (DOR) form correctly.
- 20.03 Complete the DER monthly operation report (MOR) form correctly.
- 20.04 Identify the DER rule requirements for the operation of standby and emergency equipment.
- 20.05 Identify the DER rule requirements for microbiological monitoring and analyses.
- 20.06 Identify the DER rule requirements for sampling and testing.

21.0 DESCRIBE AND FOLLOW FEDERAL, STATE, AND LOCAL LAWS FOR THE HANDLING, STORAGE, AND USE OF TOXIC AND HAZARDOUS MATERIALS--The student will be able to:

- 21.01 Identify the kinds of information presented on the Material Safety Data Sheets.
- 21.02 Describe requirements for in-plant training and the accessibility of information on hazardous and toxic substances (Chapter 442, F.S.).
- 21.03 Identify the reporting requirements as specified in SARA Title III and Chapter 252, F.S.
- 21.04 Describe the responsibilities toward the community as specified in SARA Title III and Chapter 252, F.S.

22.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 22.01 Conduct a job search.
- 22.02 Secure information about a job.
- 22.03 Identify documents that may be required for a job application.
- 22.04 Complete a job application.
- 22.05 Demonstrate competence in job-interview techniques.
- 22.06 Identify appropriate responses to criticism from employers, supervisors, or others.
- 22.07 Identify acceptable work habits.
- 22.08 Demonstrate knowledge of how to make job changes appropriately.

- 22.09 Demonstrate acceptable employee-health habits for the treatment-facility environment.
- 22.10 Identify materials and documents needed for a professional library.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Water Treatment Plant Operation - Level B
Occupational Area: Public Service Occupations

PSAV

Program Numbers P150507
CIP Number 0715.050603
Grade Level 30, 31
Length 144 hours
Certification TEC CHEM @7 G
WSP OPER @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as water treatment facility operators (50144025), or to provide supplemental training for persons previously or currently employed as water treatment facility operators in accordance with Chapter 17-550, 555, 560, and 17-602, F.A.C. as approved by the Florida Department of Business and Professional Regulation. The program is offered at three levels to prepare individuals for the C, B, and A levels of Water Treatment Facility Operator Certification. The C-level is the fundamental level of training, students are introduced to the principles of water treatment, operation and maintenance of treatment facility equipment, and a full-range of process control procedures. Since C-level training covers a broad range of subjects which may be entirely new to the student, the amount of detail which can be taught is limited. Therefore, the C-level is the fundamental level in terms of the depth of study, but is actually comprehensive in terms of the range of facility operating skills covered.

The B-level is the intermediate level of training. At the B-level the student should already be familiar with plans and operations. Emphasis will be on developing a more thorough understanding of operational process control. The A-level is the most advanced level and preparation for it will emphasize the application of problem solving skills through facility management. This management level course is separate.

The content covered in the three levels includes, but is not limited to, source water characteristics; water treatment facility orientation; water quality and identification; disinfection; water treatment processes and operational techniques; sampling, testing, and laboratory analysis; supervision; operation maintenance and inspection of facility equipment; application of current Department of Environmental Protection (DEP) regulations and standards; facility administration and management techniques; and troubleshooting operational control problems. The emphasis is on skills that are needed for effective treatment process control. The program emphasizes lime softening and includes reverse osmosis.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through or

practice. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and water treatment facility activities are integral part of this program. In-plant testing and treatment process activities are essential.
- III. **SPECIAL NOTE:** Water Treatment Facility Operator certificates are available in levels A, B, and C from the Department of Business and Professional Regulation, upon passing the appropriate certification examination after completion of the required course and work experience. Guest speakers and field trips are important contributions to the program. Supplemental training is available through the Florida Water and Pollution Control Operators Association.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: A training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 144 hours for each level.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the B-level student will be able to:
- 01.0 Analyze the constituents of water and select the appropriate treatment.
 - 02.0 Identify advanced sampling techniques and explain the significance of the steps.
 - 03.0 Demonstrate competence in solving algebra, and ratio and proportion problems in the water treatment process.
 - 04.0 Demonstrate process optimization for water treatment.
 - 05.0 Analyze and correct facility operational problems.
 - 06.0 Demonstrate equipment inspection and preventive maintenance for water treatment.
 - 07.0 Identify and follow appropriate DEP rules for operation and management of a public potable water facility.
 - 08.0 Describe and follow federal, state, and local laws concerning the handling, storage, and use of toxic and hazardous materials.

- 09.0 Describe energy conservation and identify ways to conserve energy in the water treatment facility.
- 10.0 Demonstrate supervisory skills.
- 11.0 Demonstrate employability skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Water Treatment Plant Operation - Level B
Secondary Number:
Postsecondary Number: P150507

01.0 ANALYZE THE CONSTITUENTS OF WATER, AND SELECT THE APPROPRIATE TREATMENT-
The student will be able to:

- 01.01 Describe the water-treatment processes common in Florida.
- 01.02 Describe those processes that may reduce or control a contaminant for which maximum contaminant levels (MCLs) exist.

02.0 IDENTIFY ADVANCED SAMPLING TECHNIQUES, AND EXPLAIN THE SIGNIFICANCE OF THE STEPS--The student will be able to:

- 02.01 Identify laboratory tests required by the Safe Drinking Water regulation.
- 02.02 Define pathogenic organisms, including bacteria, protozoa, and virus, and describe their disease associations.
- 02.03 Determine whether the finished water is acceptable or unacceptable according to laboratory results.
- 02.04 Select the appropriate treatment for a problem identified through laboratory testing.
- 02.05 Describe the laboratory quality-control checks and required documentation.

03.0 SOLVE ALGEBRA, RATIO, AND PROPORTION PROBLEMS IN THE WATER-TREATMENT PROCESS--The student will be able to:

- 03.01 Perform advanced math problems including ratio and proportion.
- 03.02 Identify metric measurements and perform conversions.
- 03.03 Perform algebraic calculations essential to water treatment, when given values for components.

04.0 DEMONSTRATE PROCESS OPTIMIZATION FOR WATER TREATMENT--The student will be able to:

- 04.01 Describe the advanced principles and operational practices of coagulation and flocculation.
- 04.02 Describe the advanced principles and operational practices of sedimentation.
- 04.03 Describe the advanced principles and operational practices of disinfection.
- 04.04 Describe the advanced principles and operational practices of filtration.
- 04.05 Describe the advanced principles and operational practices of corrosion control.
- 04.06 Describe the advanced principles and operational practices of taste and odor control.
- 04.07 Describe the advanced principles and operational practices of iron and manganese control.

- 04.08 Describe the advanced principles and operational practices of fluoridation.
- 04.09 Describe the advanced principles and operational practices of softening.
- 04.10 Describe the advanced principles and operational practices of demineralization.
- 04.11 Describe the advanced principles and operational practices of trihalomethanes.
- 04.12 Demonstrate process optimization for coagulation and flocculation.
- 04.13 Demonstrate process optimization for sedimentation.
- 04.14 Demonstrate process optimization for disinfection.
- 04.15 Demonstrate process optimization for filtration.
- 04.16 Demonstrate process optimization for corrosion control.
- 04.17 Demonstrate process optimization for taste and odor control.
- 04.18 Demonstrate process optimization for iron and manganese control.
- 04.19 Demonstrate process optimization for fluoridation.
- 04.20 Demonstrate process optimization for softening.
- 04.21 Demonstrate process optimization for demineralization.
- 04.22 Demonstrate process optimization for trihalomethanes.

05.0 ANALYZE AND CORRECT FACILITY OPERATIONAL PROBLEMS--The student will be able to:

- 05.01 Demonstrate troubleshooting techniques and corrective action for coagulation and flocculation.
- 05.02 Demonstrate troubleshooting techniques and corrective action for sedimentation.
- 05.03 Demonstrate troubleshooting techniques and corrective action for disinfection.
- 05.04 Demonstrate troubleshooting techniques and corrective action for filtration.
- 05.05 Demonstrate troubleshooting techniques and corrective action for corrosion control.
- 05.06 Demonstrate troubleshooting techniques and corrective action for taste and odor control.
- 05.07 Demonstrate troubleshooting techniques and corrective action for iron and manganese control.
- 05.08 Demonstrate troubleshooting techniques and corrective action for fluoridation.
- 05.09 Demonstrate troubleshooting techniques and corrective action for softening.
- 05.10 Demonstrate troubleshooting techniques and corrective action for demineralization.
- 05.11 Demonstrate troubleshooting techniques and corrective action for trihalomethanes.

06.0 DEMONSTRATE EQUIPMENT-INSPECTION AND PREVENTIVE-MAINTENANCE PROCEDURES--The student will be able to:

- 06.01 Identify the components of a preventive maintenance plan.
- 06.02 Use trend analysis in preventive maintenance.
- 06.03 Perform a site inspection.

- 06.04 Develop a training plan (for a new employee) for inspection of equipment.
- 07.0 IDENTIFY AND FOLLOW APPROPRIATE DEPARTMENT OF ENVIRONMENTAL REGULATION (DER) RULES FOR THE OPERATION AND MAINTENANCE OF A PUBLIC POTABLE-WATER FACILITY--The student will be able to:
 - 07.01 Explain the rules in Chapter 17-602, F.A.C., covering duties, responsibilities, certification requirements, testing, renewal, staffing, and facility classification.
 - 07.02 Apply rules concerning samples and analyses at water-treatment facilities (Chapter 17-550, F.A.C.).
 - 07.03 Complete the DER monthly operating report (MOR) form correctly.
 - 07.04 Follow DER rules that apply to procedures such as reclaiming water and managing residuals.
- 08.0 DESCRIBE AND FOLLOW FEDERAL, STATE, AND LOCAL LAWS FOR THE HANDLING, STORAGE, AND USE OF TOXIC AND HAZARDOUS MATERIALS--The student will be able to:
 - 08.01 Identify the kinds of information presented on the Material Safety Data Sheets.
 - 08.02 Describe requirements for in-plant training and the accessibility of information on hazardous and toxic substances (Chapter 442, F.S.).
 - 08.03 Identify the reporting requirements as specified in SARA Title III and Chapter 252, F.S.
 - 08.04 Describe the responsibilities toward the community as specified in SARA Title III and Chapter 252, F.S.
- 09.0 DESCRIBE ENERGY CONSERVATION, AND IDENTIFY WAYS TO CONSERVE ENERGY IN THE WATER-TREATMENT FACILITY--The student will be able to:
 - 09.01 Identify the causes of energy loss.
 - 09.02 Rank various pieces of equipment in order of energy consumption.
 - 09.03 Describe procedures for performing an energy survey.
 - 09.04 Describe methods to conserve energy, such as equipment and process adjustments.
- 10.0 DEMONSTRATE SUPERVISORY SKILLS--The student will be able to:
 - 10.01 Identify supervisory skills and various leadership styles.
 - 10.02 Delegate responsibility and assign tasks to employees.
 - 10.03 Follow the proper procedure for handling employee grievances.
 - 10.04 Follow the proper procedure for disciplining employees.
 - 10.05 Follow staffing guidelines in planning.
 - 10.06 Conduct an orientation of a new employee, and follow the training program.
 - 10.07 Evaluate employees objectively.
 - 10.08 Identify emergency situations and respond appropriately.
 - 10.09 Identify the components of the budgeting process.
 - 10.10 Demonstrate inventory-control procedures.
 - 10.11 Explain the importance of ethics in supervision.

- 10.12 Identify the role of the supervisor in a facility-safety program.
- 10.13 Identify the role of the supervisor in customer relations.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 11.01 Conduct a job search.
- 11.02 Secure information about a job.
- 11.03 Identify documents that may be required for a job application.
- 11.04 Complete a job application.
- 11.05 Demonstrate competence in job-interview techniques.
- 11.06 Identify appropriate responses to criticism from employers, supervisors, or others.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate knowledge of how to make job changes appropriately.
- 11.09 Demonstrate acceptable employee-health habits for the treatment-facility environment.
- 11.10 Identify the materials and documents needed for a professional library.

**Florida Department of Education
CURRICULUM FRAMEWORK**

Program Title: Water/Wastewater Treatment Plant Operation A
Occupational Area: Public Service Occupations

PSAV

Program Numbers P150529
CIP Number 0715.050605
Grade Level 30, 31
Length 120 hours
Certification WSP OPER @7 G
TEC CHEM @7 G

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as managers of water or wastewater treatment facilities, or to provide supplemental training for persons previously or currently employed as water treatment facility operators in accordance with Chapter 17-550, 555, 560, and 17-602, F.A.C. as approved by the Florida Department of Business and Professional Regulation. This program is the third level of training and education, preparing individuals for the A level of Water or Wastewater Treatment Facility Operator certification. The C level is the fundamental level of training. The B level is the intermediate level of training, with emphasis on operational process control, troubleshooting, and supervision. The content of the A level includes, but is not limited to, facility supervision, supervision theory and skills, organizational behavior, personnel supervision, budget preparation, cost supervision, laboratory supervision, planning, and employability skills.

Reinforcement of skills in water or wastewater treatment and the mathematics involved in treatment technology is provided through a review of operator training. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the public service industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety and environmental issues.

- II. **LABORATORY ACTIVITIES:** Laboratory and facility activities are essential for this program.
- III. **SPECIAL NOTE:** Water and wastewater treatment facility operator certificates are available in levels A, B, and C from the Department of Environmental Regulation for those who complete the required programs, have the required work experience, and pass the appropriate certification exam.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following are required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and

a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

It is recommended that the student entering the A-level program have completed levels B and C (in either water treatment facility or wastewater treatment facility operator), or have the equivalent skills and knowledge. In addition, the student should have relevant work experience.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic-skills grade levels required for this postsecondary adult vocational program are 9.0 for Mathematics and 9.0 for Language. These grade-level number correspond to a grade equivalent score obtained on a state-designated basic-skills examination.

The typical length of this program for the average achieving student is 120 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the A-level student will be able to:

- 01.0 Describe theoretical facility supervision skills.
- 02.0 Demonstrate methods of organization and control.
- 03.0 Develop a plan for cost supervision.
- 04.0 Prepare budgets and personnel assignments.
- 05.0 Develop standard operating procedures for the training and orientation of new employees.
- 06.0 Demonstrate personnel selection and discipline.
- 07.0 Demonstrate contingency planning.
- 08.0 Develop and implement planning for energy conservation.
- 09.0 Demonstrate record-keeping skills and computer use in planning.
- 10.0 Demonstrate process optimization for water or wastewater treatment facilities.
- 11.0 Apply federal, state, and local rules.
- 12.0 Interpret permits and blueprints.
- 13.0 Develop a laboratory-supervision plan.
- 14.0 Demonstrate public-relations skills in community interactions.
- 15.0 Demonstrate employability skills.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Water And Wastewater Treatment Plant Operation -
Level A
Secondary Number:
Postsecondary Number: P150529

01.0 DESCRIBE THEORETICAL FACILITY-MANAGEMENT SKILLS--The student will be able to:

- 01.01 Describe the principles of management and supervision.
- 01.02 Describe concepts related to management and supervision.

02.0 DEMONSTRATE METHODS OF ORGANIZATION AND CONTROL--The student will be able to:

- 02.01 Demonstrate organizational methods.
- 02.02 Develop an organizational chart.
- 02.03 Develop a staffing pattern.
- 02.04 Identify formal and informal lines of communication.

03.0 DEVELOP A PLAN FOR COST MANAGEMENT--The student will be able to:

- 03.01 Identify the costs of operation, such as personnel, inventory, operations, energy consumption, and equipment maintenance.
- 03.02 Perform cost surveys.
- 03.03 Develop a plan for efficient operations.
- 03.04 Explain system-efficiency balance.

04.0 PREPARE BUDGETS AND PERSONNEL ASSIGNMENTS--The student will be able to:

- 04.01 Identify budget activities and categories of expense accounts related to waster- or wastewater-treatment facilities.
- 04.02 Identify techniques of budget control.
- 04.03 Prepare a budget, including long-range projections.
- 04.04 Prepare a staffing schedule, including the appropriate levels of staff for all required shifts.

05.0 DEVELOP STANDARD OPERATING PROCEDURES FOR THE TRAINING AND ORIENTATION OF NEW EMPLOYEES--The student will be able to:

- 05.01 Plan and implement an in-house orientation program for new employees.
- 05.02 Identify information that a supervisor should give a new employees, including leave procedures, insurance procedures, safety procedures, chain of command, etc.
- 05.03 Plan and implement an in-house training program that includes safety measures and hazardous or toxic materials in the work place.
- 05.04 Plan and implement a cross-training program in facility operations.

06.0 DEMONSTRATE PERSONNEL SELECTION AND DISCIPLINE--The student will be able to:

- 06.01 Identify appropriate hiring practices and interview techniques.
- 06.02 Describe the duties and responsibilities of each job position.
- 06.03 Identify control factors that are important in an organizational plan and that set limits on delegated authority.
- 06.04 Identify appropriate actions of the supervisor, the employee, etc., in a grievance procedure.
- 06.05 Identify characteristics important to the role of a supervisor.
- 06.06 Identify appropriate actions of a supervisor in evaluating personnel performance.

07.0 DEMONSTRATE CONTINGENCY PLANNING--The student will be able to:

- 07.01 Analyze potential emergency situations that can occur in a facility.
- 07.02 Develop a plan for handling problems caused by emergency situations, including what equipment would be used and what sampling would be needed.
- 07.03 Develop a procedure for responding to customer complaints.
- 07.04 Develop a procedure to ensure employee safety.
- 07.05 Develop procedures to ensure continuous operations, including preventive maintenance, alternative procedures, etc.

08.0 DEVELOP AND IMPLEMENT PLANNING FOR ENERGY CONSERVATION--The student will be able to:

- 08.01 Describe concepts related to energy conservation.
- 08.02 Identify energy-conservation measures.
- 08.03 Develop and implement a plan for energy conservation.

09.0 DEMONSTRATE RECORD-KEEPING SKILLS AND COMPUTER USE IN PLANNING--The student will be able to:

- 09.01 Develop a plan for inventory control.
- 09.02 Develop a plan for an analysis of operation and maintenance (O&M) logs and for the optimum operation of equipment.
- 09.03 Identify the various types of automation, and develop a plan for facility automation.
- 09.04 Develop a plan for selecting appropriate hardware and software, based on record-keeping needs.

10.0 DEMONSTRATE PROCESS OPTIMIZATION FOR WATER- OR WASTEWATER-TREATMENT FACILITIES--The student will be able to:

- 10.01 Develop a plan for process control to achieve efficient, energy-saving, cost-effective operation.
- 10.02 Develop a plan for testing and analyzing the treatment operations for use in long-range facility operations.
- 10.03 Develop a plan for the systematic troubleshooting of operational problems.
- 10.04 Develop a plan for documenting operations and problems in order to anticipate and avoid potential problems.

11.0 APPLY FEDERAL, STATE, AND LOCAL RULES--The student will be able to:

- 11.01 Apply rules concerning facility management.
- 11.02 Apply rules concerning samples and analyses.
- 11.03 Apply rules concerning laboratory management.

12.0 INTERPRET PERMITS AND BLUEPRINTS--The student will be able to:

- 12.01 Read and interpret blueprints of water and wastewater facilities.
- 12.02 Read the facility-construction and operating permits, and apply permit requirements to facility management.

13.0 DEVELOP A LABORATORY-MANAGEMENT PLAN--The student will be able to:

- 13.01 Identify laboratory equipment.
- 13.02 Develop and implement a plan for equipment calibration and maintenance.
- 13.03 Develop a laboratory-staffing plan.
- 13.04 Determine whether in-house laboratory operations are cost-effective.
- 13.05 Develop a procedure for quality assurance/quality control in a facility laboratory.
- 13.06 Develop a procedure for obtaining certification for a facility laboratory.
- 13.07 Develop a sampling/analysis schedule for a facility laboratory based on sampling requirements.

14.0 DEMONSTRATE PUBLIC-RELATIONS SKILLS IN COMMUNITY INTERACTIONS--The student will be able to:

- 14.01 Plan and implement facility tours for the public.
- 14.02 Handle press and public inquiries appropriately.
- 14.03 Reassure the public if a potential emergency situation arises, using a professional, calm manner.

15.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 15.01 Conduct a job search.
- 15.02 Secure information about a job.
- 15.03 Identify documents that may be required for a job application.
- 15.04 Complete a job application.
- 15.05 Demonstrate competence in job-interview techniques.
- 15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 15.07 Identify acceptable work habits.
- 15.08 Demonstrate knowledge of how to make job changes appropriately.
- 15.09 Demonstrate acceptable employee-health habits.
- 15.10 Determine requirements for a new position.
- 15.11 Advertise for the position, including the job description, job responsibilities, education requirements, and job conditions.
- 15.12 Analyze job applications to select qualified candidates to interview.

- 15.13 Conduct interviews.
- 15.14 Notify interviewees of the results, and conduct follow-up activities.
- 15.15 Use appropriate human-relations and communication skills.
- 15.16 Train, evaluate, and discipline employees objectively.

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